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An archaeological survey of "The Governor's Land," James City County, Virginia

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**AN ARCHAEOLOGICAL SURVEY
OF
"THE GOVERNOR'S LAND,"
JAMES CITY COUNTY, VIRGINIA**

A Thesis

Presented To

**The Faculty of the Department of Anthropology
The College of William and Mary in Virginia**

**In Partial Fulfillment
Of the Requirements for the Degree of
Master of Arts**

by

John H. Sprinkle, Jr.

1984

APPROVAL SHEET

This thesis is submitted in partial fulfillment of
the requirements for the degree of

Master of Arts

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DEDICATION

This thesis is dedicated to my parents, John H. Sprinkle and Jane B. Sprinkle, for their many contributions to my character and education.

TABLE OF CONTENTS

	Page
DEDICATION.	iii
ACKNOWLEDGEMENTS.	v
LIST OF FIGURES	vi
ABSTRACT.	vii
INTRODUCTION.	2
CHAPTER I. SAMPLING LITERATURE REVIEW.	10
CHAPTER II. GOVERNOR'S LAND SURVEY	28
CHAPTER III. SURVEY RESULTS.	44
APPENDIX A: ARCHAEOLOGICAL SITE FORMS.	60
BIBLIOGRAPHY.	88

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The research described in this thesis is, in part, a product of the endeavors of the numerous people who have aided me throughout my academic career. To these many persons my grateful acknowledgement is offered.

I wish to specifically thank the landowners of "The Governor's Land" for their cooperation and assistance in the completion of this research. In addition, I would like to express my thanks to the students of the College of William and Mary who provided the labor for this project.

Finally, I acknowledge the efforts of Professors Norman F. Barka and James P. Whittenburg for their careful reading and helpful criticism of the manuscript. I am most greatly indebted to Professor Theodore R. Reinhart, who, as my thesis advisor, allowed me the freedom to develop this research design while always providing the appropriate guidance and criticism.

LIST OF FIGURES

Figure	Following Page
. Location of Governor's Land	2
. Location of Governor's Land Survey Area	2
. Typical Survey Quadrat.30
. Location of Soil Associations31
. Shovel Test Form.43
. Archaeological Site Locations45
. Field Methodology Test Results.51

AN ARCHAEOLOGICAL SURVEY
OF
"THE GOVERNOR'S LAND,"
JAMES CITY COUNTY, VIRGINIA

ABSTRACT

The purpose of this thesis is to design and implement an archaeological survey of a part of the tract known as "The Governor's Land," located in James City County, Virginia. This research was begun in order to identify archaeological sites in this historically important area of Tidewater Virginia which has not previously been the subject of extensive archaeological investigation.

The research design developed in this thesis combines both probabilistic and purposive methods of archaeological survey. Probabilistic survey techniques were applied to forested areas of Governor's Land in order to collect representative site information without the expense and hardships of a comprehensive survey. Purposive survey was conducted in areas of

agricultural fields where more traditional
archaeological survey methods were appropriate.

The results of this study indicate that the
application of purposive and probabilistic
archaeological survey techniques in appropriate
environments yields significant information for the
determination of site location.

JOHN HAROLD SPRINKLE, JR.

DEPARTMENT OF ANTHROPOLOGY

THE COLLEGE OF WILLIAM AND MARY IN VIRGINIA

An Archaeological Survey of "The Governor's Land,"
James City County, Virginia

INTRODUCTION

Beginning in the spring of 1983 the Department of Anthropology at the College of William and Mary began a concentrated archaeological research effort on a tract of land in James City County, Virginia known as "The Governor's Land." The research described in this thesis was a part of these investigations which were under the direction of Dr. Theodore R. Reinhart.

Located on Virginia's Coastal Plain, the property today known legally as "The Governor's Land" consists of approximately 1400 acres and situated at the junction of the James and Chickahominy Rivers in Tidewater, Virginia (Figure 1 and 2). The Governor's Land begins along the north bank of the James River about 5 miles upriver from Jamestown Island at Shellbank Creek and extends westward to Barret's Point where the Chickahominy flows into the James. The northern boundary of this survey area is the John Tyler Highway (Virginia Route 5). Today Governor's Land is owned by a limited partnership without whose

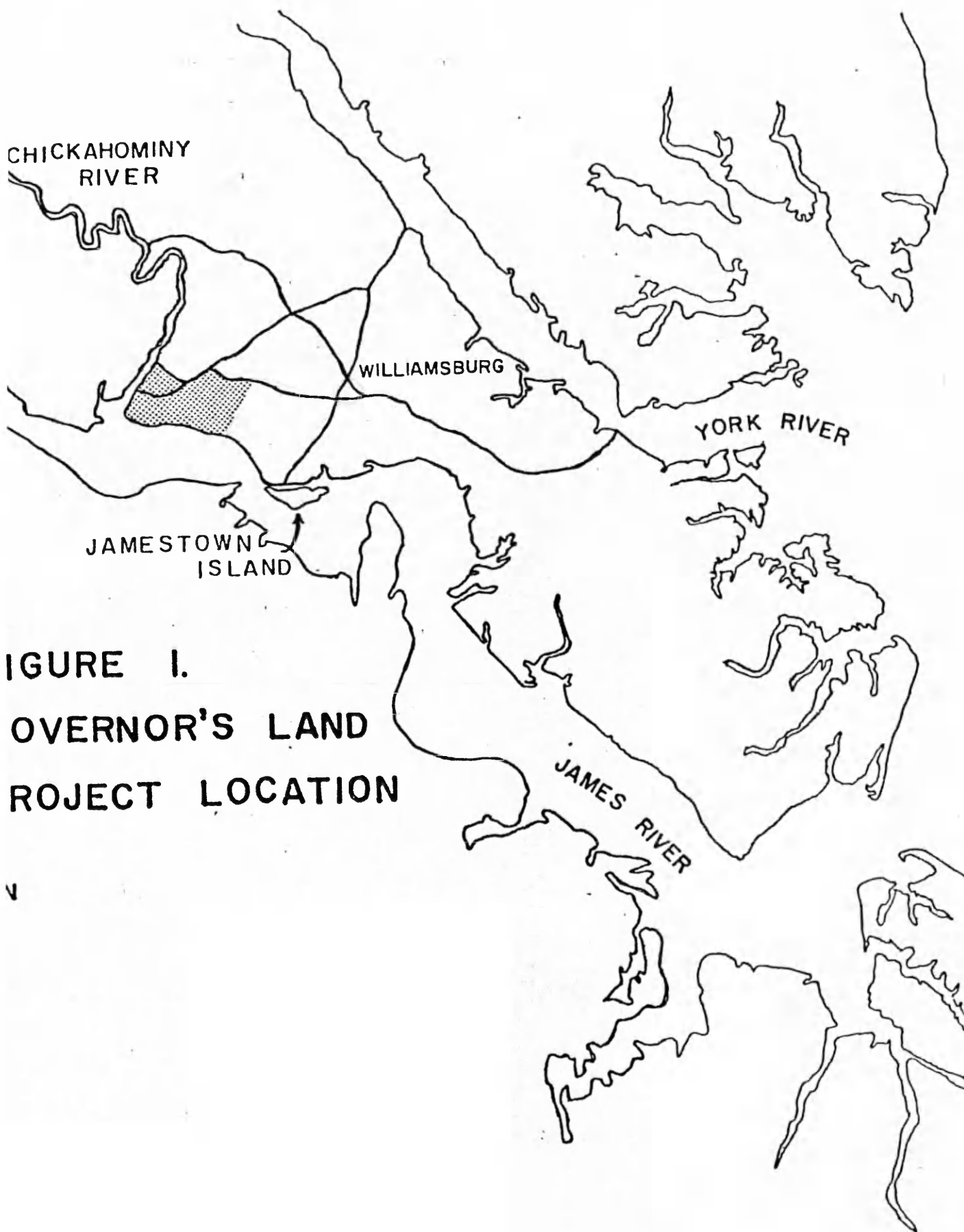
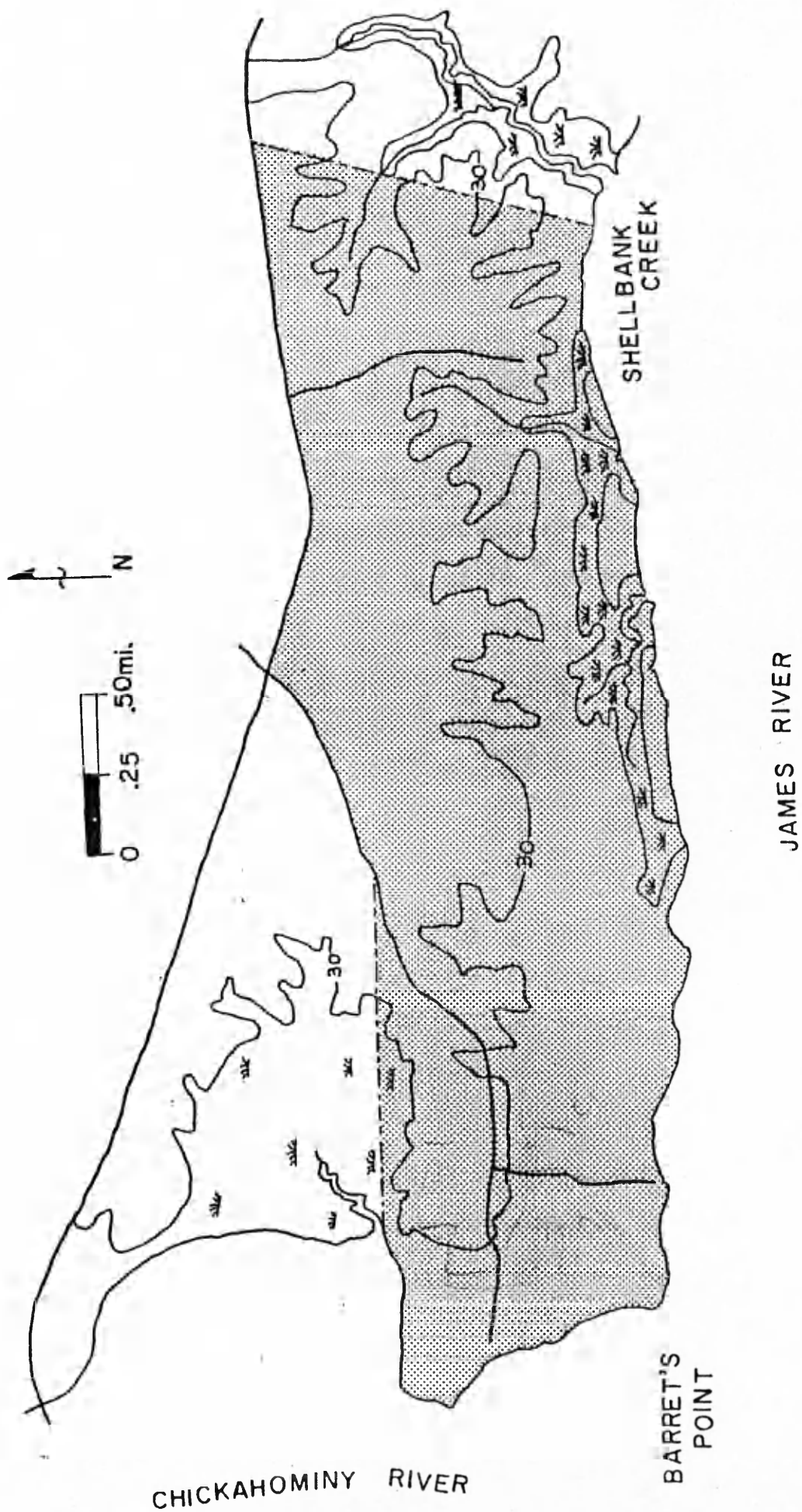


FIGURE I.
GOVERNOR'S LAND
PROJECT LOCATION

FIGURE 2. SURVEY REGION



cooperation and assistance none of the research presented here would have been possible.

Historically, this survey region derives its name from a close association with early English settlement in Virginia. In 1619, during a re-organization of the Virginia Company, 3,000 acres of land were set aside in the Corporation of James City for the maintenance of Sir George Yeardley's office as colonial governor. This tract called "The Governor's Land" was located in "the best and most convenient place" near Jamestown. At the same time an additional 3,000 acres were laid out further to the west of Governor's Land which were devoted to the support of the Virginia Company. Though today it is known as "The Governor's Land" the survey area described in this research was originally a part of this grant known as "The Company's Land" (Anon 1895:154-158).

Historical research on these "public estates" has revealed that they were settled by indentured servants brought over from England by the Virginia Company.

Since that time tenant farmers have probably continued to occupy and farm these lands. This region's association with "people who didn't have a voice (and) who didn't leave many documents behind" presents archaeologists with an excellent opportunity to flesh out the history and lifeways of these common folk. It is through the elucidation of what James Deetz recently called "minority history" that archaeologists can make effective contributions to historical understanding (Friedman 1983:45).

The archaeological research potential of the Governor's Land has been amply demonstrated by the archaeological survey and excavation carried out by the Virginia Research Center for Archaeology (VHLC 1975, Outlaw 1980) and others (Weaver 1979) in the area known as "The Maine," located in Governor's Land close to Jamestown Island. These recent historical and archaeological investigations support the uniqueness of the Governor's Land research potential through the placement of a portion of this tract in a National Register of Historic Places Archaeological District

(VHLC 1975).

The history of archaeological research in this region illustrates the various cultural and natural agents which threaten the archaeological resources of the Governor's Land. Today the area is immediately adjacent to recent suburban development which has already destroyed many archaeological sites. In addition, shoreline erosion along the James River has significantly impacted an unknown number of sites formerly occupied in this region.

As a relatively undeveloped, mostly forested, tract the Governor's Land offers archaeologists a rather unusual opportunity to study an area of significant archaeological and historical importance before the destruction of the archaeological record that normally accompanies commercial or suburban development. The (real estate) signs of this eventual threat of development line the road leading to Governor's Land and stress the need for archaeological research before the disturbance of sites begins.

It is sincerely hoped that the cooperation between developers, landowners, and archaeologists, such as that which allowed this research to take place, will continue and expand in Tidewater, Virginia so that significant historical and anthropological information may be obtained from areas such as the Governor's Land before their suburban transformation in the near future. Such cooperation could take the form of the identification of archaeological sites with considerable research potentials followed by either protection from disturbance until excavation or preservation through avoidance. State or locally significant sites might also be flagged for special consideration through placement on the National Register of Historic Places.

Because of its unique position in Virginia history, archaeological research at the Governor's Land presents a opportunity for answering questions that are both anthropological and historical in nature (as an example see Earle 1979). However, several problems in dealing with the archaeological record of the

Governor's Land exist and one of these is the reason for this thesis.

Perhaps the most pressing archaeological research question present at the Governor's Land is how to identify the location of archaeological remains given the large expanse of forest cover that dominates the landscape of the region. It is estimated that over 75 percent of the survey area discussed in this thesis is covered by some form of aboreal vegetation. This is precisely the type of ground cover that makes the traditional survey methodology of surface collection of plowed fields impossible. One purpose of this thesis then is to develop a method for finding sites in the forested areas that is both archaeologically sound and does not, in Flannery's words (1976:159) "...border on lunacy." In this thesis, the development of a non-traditional probabilistic survey technique, when coupled with a more traditional survey of agricultural fields, is demonstrated as an adequate methodology for the survey of archaeological resources. The identification of such cultural resources present on

the Governor's Land is the primary purpose of this research endeavor.

To this end, chapter 1 of this thesis will discuss probabilistic archaeological sampling concepts as they apply to survey in the forests of Governor's Land.

Chapter 2 will take the information gained from this review of archaeological sampling techniques and describe the development of the two part survey strategy developed for use at Governor's Land. The first strategy was a random quadrat sampling design with purposive stratification for use in portions of the forested areas of the survey region. The second strategy was a "purposive" survey of the agricultural fields present in the study area. Also discussed is the development of appropriate "field" methodology for use in the survey of forested areas.

Finally, chapter 3 will present the results of the survey including a test of the probabilistic sampling methodology and will offer comments about the utility

of probabilistic sampling techniques in forested environments. In addition, an interpretation of the prehistoric and historic settlement pattern will be presented based on the information gained from this archaeological survey.

Chapter 1 Sampling Literature Review

The purpose of this archaeological sampling literature review is to identify the appropriate methods for locating sites at Governor's Land. Because limited time and adverse survey conditions prohibited a comprehensive survey of the 1400 acres of this region probabilistic sampling techniques were investigated for possible use.

The major advantage of probabilistic sampling to archaeologists is that it gives them "...representative and reliable data within the bounds of their restricted time and monetary resources" (Binford 1972:139). Probabilistic sampling is a cost effective way of getting a usable information set from a region without the expense of a comprehensive survey because only a representative portion of the area is searched for the presence of archaeological remains. This fact makes a probabilistic sampling technique ideal for Governor's Land because of the adverse archaeological survey conditions.

Probabilistic sampling leads to a representative collection of information from the archaeological record. It recognizes the fact that there are biases contained within all forms of archaeological research and attempts to control for these biases by making explicit the methodology used in finding and excavating sites. Probabilistic sampling thus has advantages over more traditional forms of archaeological survey in that it allows for the evaluation of the "quality" or representative nature of archaeological information through the explication of the contextual biases found in all archaeological research and data. In addition, probabilistic survey methods have been found to be reflective of environmental variation within a region which is not true of the more traditional archaeological techniques (Brose 1976).

Probabilistic sampling also allows for the preservation of the archaeological record because through its methodology not all sites are found nor excavated. This fact protects large numbers of sites from unnecessary testing or excavation. However,

probabilistic sampling can also be used to produce quantitative predictions as to the number and location of undiscovered sites. Used properly this information can aide cultural resource managers in the efficient management of archaeological resources.

The dominance of ground cover which obscures the sites at Governor's Land also supports the use of a probabilistic sampling technique for finding sites in this area. With such low surface visibility the more traditional archaeological survey method of collecting artifacts on the surface of plowed fields is impossible. In addition, probabilistic survey will allow archaeological conclusions to be drawn from "representative and reliable" data set without the need for a comprehensive survey under these difficult conditions. For these reasons it was decided that probabilistic sampling techniques should be investigated for their applicability to survey at Governor's Land.

The approach to probabilistic sampling used in the

development of the research strategy at Governor's Land was what Mueller (1974) calls "archaeo-statistical." This approach to probabilistic sampling is essentially the modification of standard "cookbook" statistical routines to conform with the problems of dealing with the archaeological record.

The primary characteristic of probability sampling is that every element of the sample must have a known probability for inclusion in that sample (Blalock 1960:392). It is then important to realize that sites within a region do not have a known probability for being included in a sample because their number and location are not known beforehand. Thus, probabilistic sampling can not be used to sample sites directly. In order to use probability in an archaeological survey some other phenomena must be found that is empirically observable, related to the patterned behavior we wish to observe, and of a known distribution so the probability of inclusion in any sample may be recorded (Custer 1979:10). "The most common phenomenon that fulfills these criteria and is used as a basis in

regional archaeological sampling is the land surface"
(Custer 1979: 10).

Through the sampling of representative land surfaces archaeologists can use the advantages of statistical probability to get a representative sample of places where human activities could have taken place in the past. The sampling of potential activity locations leads to a collection of artifacts associated with patterned human behavior from the past. The interpretation of this behavior is the goal of anthropological archaeology. In this manner archaeological sites in a region may be surveyed using statistical probability.

This use of the indirect observation of human behavior is characteristic of archaeology. The study of culture material is in many ways one step removed from the human behavior that is the subject of anthropological archaeology. In a similar sense the sampling of land surfaces is removed from the clusters of archaeological material (sites) that are the reasons

for survey. The use of probabilistic sampling, however, adds to the effectiveness of archaeological survey because of its explicit methodology and predictive potentials.

Since the advent of archaeological sampling consideration (Binford 1972), several examples of sampling simulations have appeared in the archaeological literature (Mueller 1975, Plog 1976, Custer 1979). These investigations attempt to discover the best sampling design for a particular region or environmental setting by taking a comprehensive survey and applying several different types of sampling strategies to this information. The effectiveness of each sampling design is then evaluated according to some standard that seeks to measure the efficiency of each design at finding representative numbers of sites within a region. The development of a sampling design for the Governor's Land archaeological survey required information from a sampling simulation which took place in an similar environment and that considers similar portions of the archaeological record.

Most sampling simulations have several common problems that detract from their usefulness as the foundation for the Governor's Land survey. First, most sampling simulations only deal with environments where ground visibility is not a hindrance to archaeological survey (Flannery 1976:159). Second, few of the research designs deal with the possibility of buried landscapes on which sites may be hidden (Custer 1979:4-54). Any sampling design used as a basis for survey at Governor's Land must consider both limited ground visibility and buried sites. Third, many of the simulations use evaluations of efficiency that do not measure how representative information is from a survey but rather they measure only the number of sites found by each methodology (Custer 1979:4-54).

The most important sampling simulation for the Mid-Atlantic region is Custer's (1979) dissertation on the Verona Lake and New River areas of western Virginia. These investigations provide the only available evaluation of different sampling designs for use in the forested environments of the Eastern

woodlands. In addition, his review of archaeological sampling literature and sampling simulations has been most instructive in the problems of probabilistic sampling.

Fieldwork on the New River Archaeological survey consisted of two-man teams walking the entire 5.5 square miles which made up the two areas of proposed dam construction. Areas of potential buried post-Pleistocene landscapes were investigated either by soil augering or with test pits (Custer 1979:56). In areas of restricted visibility trenching tools were used to remove soil and expose any cultural remains. This field work discovered a total of 82 sites with 63 dateable components (Custer 1979:57).

Following predictive models from Gardner and others (Custer 1979:58), three environmental variables were recorded from each site during the fieldwork. These variables were geomorphological setting, soil association, and surface water setting (Custer 1979:59-64). These culturally relevant variables were

used to guide the stratification of environments in the simulation study (Custer 1979:64-67).

Custer's sampling simulation was accomplished by gridding the study areas into 400-foot-square units, called quadrats, that became the sampling units for the simulations of archaeological survey. Stratification of the region into environmental zones was completed by classifying each quadrat with respect to the three culturally relevant environmental factors. The six sampling designs tested in Custer's study (1979:100) are shown below in the order of their relative efficiency for finding representative collections of archaeological sites from a region.

- | | |
|-------------------------------|-------------------------|
| 1. Systematic Quadrats | 4. Systematic Transects |
| 2. Random Transects | 5. Random Quadrats |
| 3. Stratified Random Quadrats | 6. Purposive transects |

Custer (1979:101) in general accounts for the difference between his sampling simulation and others in the archaeological literature (see Plog 1976) by his

consideration of potential buried landsurfaces and his use of subsurface testing for cultural remains. However, several points about the environmental setting of the New River study have an important effect on his results. Custer (1979:103) notes that it was because of the close packing of the environmental zones and the vertical zonation of the environments of the New River valley that both systematic quadrats and random transects provided the best results in the simulation. "The results off this study are very much a function of the vertical zonation of the environment and in this sense the ranked efficiencies of the sampling designs reflect this fact. Therefore, the extrapolation of the study's results to other environments is inappropriate" (Custer 1979:105).

It seems then that the two most effective sampling designs in Custer's simulation, systematic quadrats and random transcts, are directly influenced by the environmental setting of the study area. However, no such environmental bias is proposed for the third most effective sampling design: stratified random quadrats.

Because of these favorable results from Custer's work, the stratified random quadrat sampling routine appeared to have potential utility in the forests at Governor's Land.

Results from other sampling simulations, most notably Plog's (1976:136), confirm the effectiveness of stratification in archaeological sampling routines. Stratification, as archaeologists use it, is simply the division of a region into more homogeneous zones through variables that are significant in determining site locations. This sectioning of survey regions is designed to increase the representative nature of probabilistic sampling in response to both cultural and natural factors. Plog's results from Mexico document the notion that stratification of a region yields more consistent results than simple random sampling (1976:149).

However, Plog's results (1976:151) differs from Custer's by maintaining that transect samples (rectangular shaped sampling units) are more efficient

than quadrat samples (square sampling units). A closer reading of Plog's simulation results indicates that because "...the greater the number of sampling units the greater the precision of the estimate" then his simulation study was not a fair test of the relative efficiency of quadrat versus transect sampling unit shape.

The preference of transects over quadrats by archaeologists for sampling designs seems to be directly related to the relative ease of survey with linear transects rather than any proven statistical efficiency. Indeed, Flannery (1976:159) proposes that transects should be used as the sampling unit shape for environments with dense vegetation such as the lowland Maya jungle based on the success of a "brecha strip" survey (Puleston and Callendar 1976) near Tikal. Judge et al. (1975:120) also note the archaeological desirability for transect sampling because of its ease of implementation in the field.

There is, as stated above, some unconvulsive

statistical evidence for the use of transects over quadrats (Plog 1976:151); however, another reason given for choosing transects is that they "hypothetically cover" a larger area than quadrats of the same size. Thus, transects can be expected to find a greater percentage of the total potential number of sites than quadrats (Plog et al. 1978:401). It is interesting to note that Custer's results from the New River area (1979:100) differ from Plog's assertion (Plog et al. 1978:401) that transects will always be more efficient at finding sites in simulation studies than quadrats. It is more important to note that finding more sites is not the purpose of probability sampling (Flannery 1976:135, Custer 1979:34), rather the purpose is to find representative collections of sites in the same or similar proportions as they existed in the past. The evaluation of different sampling designs within a sampling simulation must test the relative efficiency for finding representative populations of sites and not for finding the most numbers of sites.

In this vein of thought, Plog et al. (1978:401) concluded that because only a few population parameters have been considered in comparisons of transects versus quadrats, the relative efficiency of these two sampling unit shapes for finding representative collections of sites can not be stated for certain. Consideration of sampling unit shape must always return to Plog's comment (1976:151) that precision is directly related to the total number of sampling units and in this respect quadrats must be preferred over transects. In addition, there is Custer's sampling simulation for the Mid-Atlantic region that demonstrates the relative efficiency of quadrat shaped sampling designs (Custer 1979:100).

One important study which demonstrates the effectiveness of the stratified random quadrat sampling design in environments with low visibility is Lovis' (1976:364) work in the Traverse Corridor woodlands of Michigan. Lovis attempted to take Mueller's (1974:66-67) recommendations for sampling program design and adapt it to the low surface visibility associated

in forested environments. To this end, a stratified random quadrat sample utilizing three strata and quadrats (called quartersections by Lovis) 880 yards on a side was implemented (Lovis 1976:368). It should be noted that each strata was divided up into sub-areas to prevent the clustering of sampling units which often accompanies random sampling (see Berry and Baker 1968:92-93). Four-person teams spaced 100 yards apart excavated one-foot-square test units every 100 yards within each quartersection producing a systematic grid of 64 shovel tests per quadrat (Lovis 1976:368-369). Test units consisted of lifting the forest floor root mat to check for adhering cultural material while some units were dug to a greater depth. Based on estimations of site sizes found in the survey, Lovis (1976:371) suggests that a minimum walkover and testing interval of 25 yards would yield better results than the 100 yard interval used in his survey. However, this strategy would increase the number of test units per quartersection from 64 to 1,225, and thus was rejected for archaeological reconnaissance level surveys as being impractical.

Lovis' use of quadrats 880 yards on a side brings up the issue of sample unit size. Plog's (1976:157) sampling simulations from Oaxaca, Mexico demonstrated that the greatest gains in efficiency for sampling designs came from reducing the size of the sampling unit. Plog et al. (1978:401-402) also found that smaller units always found more sites than larger units. However, Cowgill (1975:266) notes that sampling unit should generally be larger than the units of interest (i.e., sites) and yet small enough so that any site patterning is revealed. Sampling unit size should then be geared to the particular region's vegetation patterns and probable site sizes within that region. Plog et al. (1978:401) suggests that sampling units should be sized so that they might be surveyed by two or four person crews within a single day.

Another topic for consideration when developing a probabilistic sampling design is sampling percentage. Fortunately, Custer's research on the New River Archaeological Survey produced significant results concerning survey regions of under five square miles in

size. Custer (1979:149) demonstrated that the variation of the sampling fraction in his sampling simulation provided little or no change in the efficiency of the sampling designs tested. Because of this fact, sampling percentage for surveys under five square miles can vary according to the restrictions of time and money placed on the archaeologists.

In sum, this discussion has centered on the development of the most efficient sampling strategy for potential use in the limited surface visibility environments found at Governor's Land. Custer's sampling simulation from Virginia and others (specifically Plog's 1976:136-158) suggest that a stratified random quadrat sampling routine may be useful regardless of the environmental zonation in a region. Custer's work (1979:58) has also demonstrated three culturally relevant environmental variables for use in the purposive stratification of a region before survey. The work of Lovis in the forests of Michigan (1976) represents both an example of a possible "field" methodology for testing quadrats through the systematic

placement of test units within each sampling unit. The definition of sampling unit size has been found to be one of convenience to the archaeologist and ranges from the 400 foot quadrats of the New River study (Custer 1979:78) to the 880 yard quartersections used by Lovis (1976) Traverse Corridor study. Likewise, the sampling fraction used in probabilistic surveys of small regions has been shown not to be a significant factor in the efficiency of that particular sampling strategy for finding representative collections of archaeological sites.

The information gained from this review of the appropriate archaeological sampling literature will be used in the next chapter to construct a sampling design for use in the forests at Governor's Land.

Chapter 2 Governor's Land Survey

The archaeological survey developed in this chapter was conducted during the spring of 1983 on the lands known today as "The Governor's Land." Labor for the fieldwork was provided by students from anthropology classes at the College of William and Mary. This survey was to be for most of the students their first field experience in archaeology and added greatly to their appreciation of the archaeological endeavor. If needed, further work on this survey could have been completed during the 1983 summer archaeological field school sponsored by the college and under the direction of Theodore R. Reinhart.

Based on the success of Lovis' (1976) use of a stratified random quadrat sampling design in similar forested environments and on the effectiveness of this strategy demonstrated by Custer's (1979) sampling simulation for the New River Valley in Virginia this probabilistic sampling methodology was chosen for use at Governor's Land.

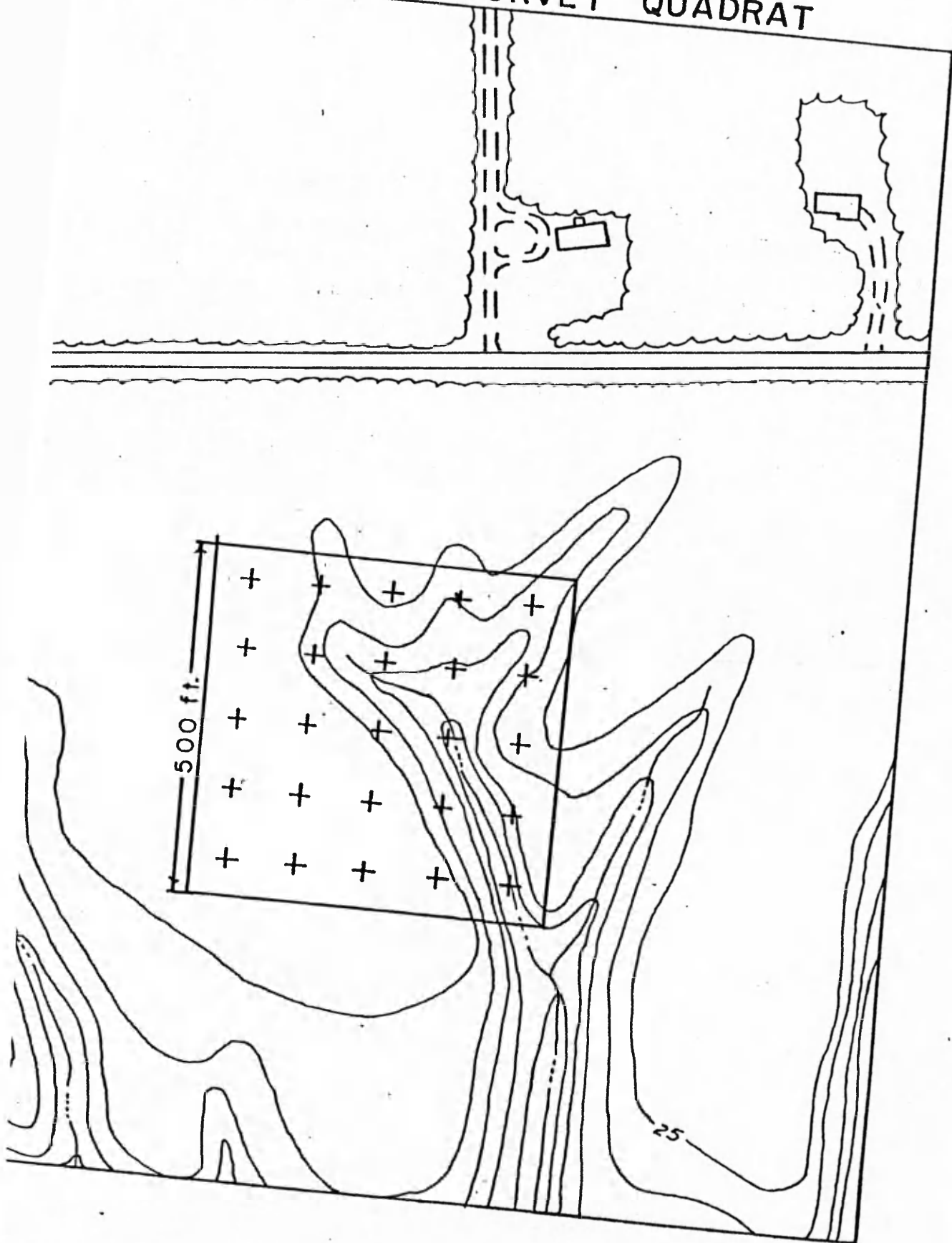
A quadrat size of 500 feet on a side was chosen by convenience because of the availability of a large scale contour map of the survey area which utilized the Virginia State Plane Coordinate system through which quadrats could be located on the landscape. This sampling unit size was also thought to be small enough for relatively inexperienced field crews to complete during one day's fieldwork. In addition, the 250,000 square foot sampling unit was considered to be larger than most, if not all, of the sites likely to be encountered during the survey. In this manner 274 quadrats at 500 feet on a side were identified for the Governor's Land survey area. Each quadrat was named by the coordinates of its southwest corner based on the Virginia state coordinate system. The James City County Planning map which utilized this coordinate system thus became the base map for this survey.

Individual quadrats would be tested by systematic test units in a manner similar to that described by Lovis (1976:368-369). The sampling interval between test units, however, was decreased from 100 yards to

100 feet which is slightly over the the recommended optimum distance of 25 yards suggested by Lovis (1976:371). The 100 foot interval between test units resulted in 25 units systematically placed within the 500 foot square quadrat. Figure 3 shows a typical quadrat with the location of the 25 test units within the sampling unit. With this strategy each test unit, therefore, became representative of the area 50 feet on each side of the test. If necessary, additional test units could be placed in "likely" areas in each quadrat that were passed over by the systematic grid of test units and that experience indicated could possibly contain cultural material. Typically, these areas would be higher spots of ground that the periodicity inherent in the systematic test grid missed.

The stratification of the quadrats identified as being within the Governor's Land survey area was accomplished based on the three culturally relevant criteria identified by Custer (1979:58). Each quadrat was thus classified on the basis of soil association, geomorphology, and surface water setting by the methods

FIGURE 3. TYPICAL SURVEY QUADRAT

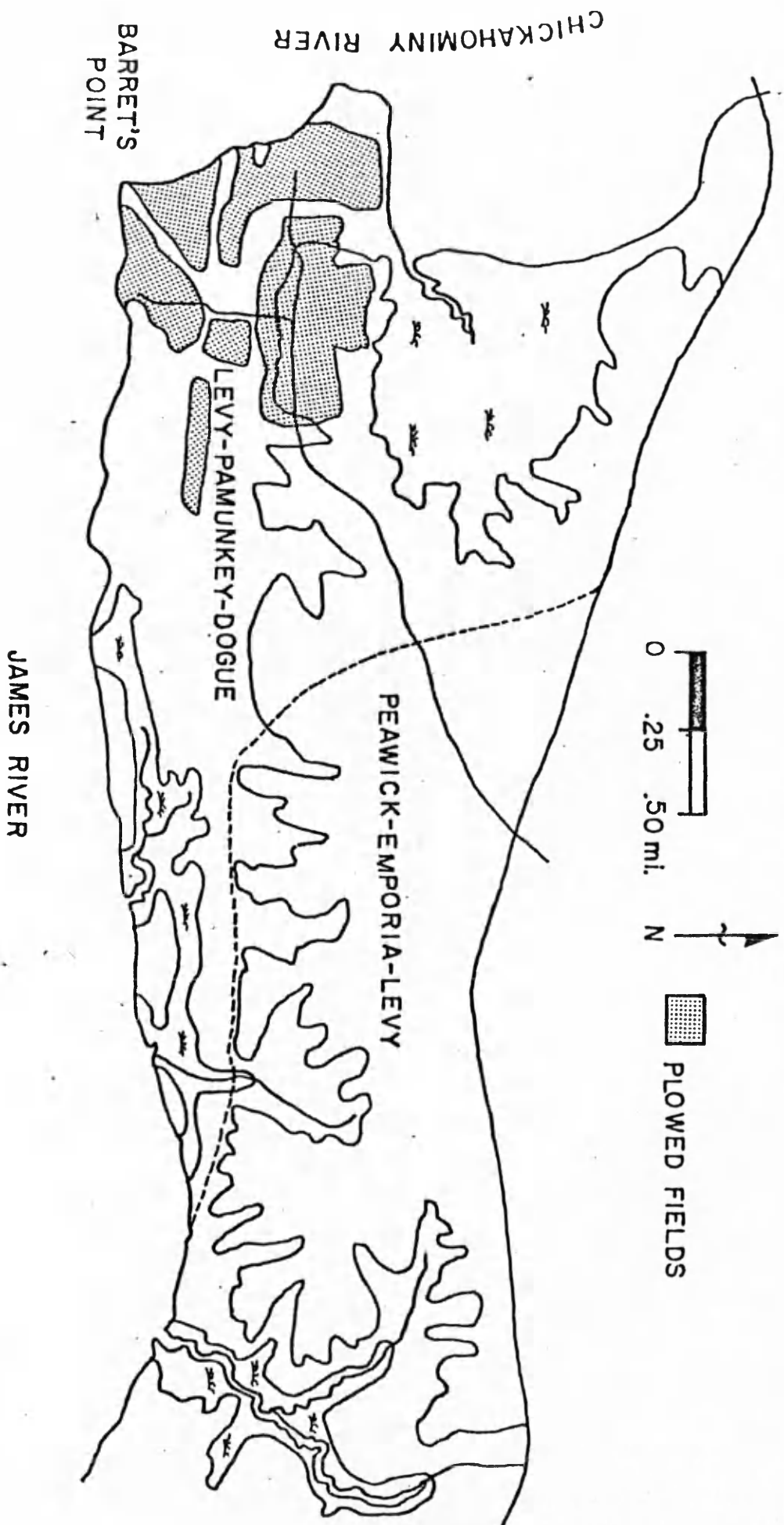


described below for each criteria.

Soil Association: The entire tract of the present day Governor's Land is made up of only two soil associations as defined by the as yet unpublished James City County Soil Survey. Figure 4 shows the location of the Levy-Pamunkey-Dogue and Peawick-Emporia-Levy soil associations at the Governor's Land. Also shown in Figure 4 is the extent of present day agricultural fields where traditional walk-over surveys were possible. During the stratification of the areas within the Governor's Land each quadrat was classified according to the dominate soil association within its boundaries.

The Levy-Pamunkey-Dogue soils are defined as deep, poorly drained to well drained soils with clayey substratum and a loamy subsoil. These soils are generally nearly level or gently sloping and are found near freshwater marshes and low terraces which at Governor's Land corresponds to the shoreline areas along both the James and Chickahominy Rivers. Of note

FIGURE 4. SOIL ASSOCIATIONS



here is the fact that this soil association contains all of the present day areas in agricultural at Governor's Land.

The Peawick-Emporia-Levy soil association is classified as moderately well drained to poorly drained soils that dominately have a clayey or loamy subsoil and substratum, These soils are nearly level to fairly steep and are usually found on high terraces, escarpments, and on very steep slopes. In general, this soil association is confined at the Governor's Land to the high terrace and plateau found along the northern and eastern portions of the survey area, including the fairly steep adjacent regions which serve as a transition to the areas along the rivers and the Levy-Pamunkey-Dogue soil association. In general, the Peawick-Emporia-Levy soil association is characterized by the forested environments which dominate the landscape at Governor's Land.

Geomorphology: Examination of the relevant United States Geological Survey topographic 7 1/2 minute quad

sheets revealed three major geomorphological zones present at Governor's Land. The first of these was named "highlands" for the purposes of this survey and consists of the large plateau of fairly level ground which dominates the northern and eastern portions of the survey area. This strata is characteristically above 25 feet in elevation above sea level and is made up of the Peawick-Emporia-Levy soil association. A geological assesment of the three geomorphological strata present at Governor's Land (Gerald H. Johnson, personal communication) indicates that there is little possibility for buried post-pliestocene land surfaces within this particular geological zone.

The second major geomorphological strata was called "lowlands" during the stratification of the Governor's Land survey area. "Lowlands" were those quadrats which were characteristically below 15 feet in elevation above sea level. This zone is located adjacent to the James and Chickahominy Rivers and has probably been seriously effected, to an unknown extent, by shoreline erosion. It is roughly associated with

the Levy-Pamunkey-Dogue soil association and is intersected by both secondary and intermittent streams. Current environmental conditions have produced several areas of swamps and marshes within this strata. This geomorphological area contains most of the present agricultural lands and has a high potential for soil accumulation resulting from coluvial and alluvial processes since the end of the Pleistocene. Thus, this geomorphological unit has within its bounds a relatively high potential for buried land surfaces.

The fairly steep slopes which form the boundary zone between the "highland" and the "lowland" geomorphological strata were classified as "transitional" areas. These environments contain areas of intermittent stream cutting and present the possibility of soil build-up and thus potential buried surfaces, due to coluvial processes. This strata contains mostly Peawick-Emporia-Levy soils and makes up the smallest geomorphological area in the Governor's Land survey region.

The classification of each quadrat into a geomorphological strata utilized the location of the 25 potential test units as data points within each quadrat. The location of each test was identified as to its associated geomorphological zone and thus the dominate strata was determined for each quadrat.

Other information, in addition to the culturally relevant variables, was recorded for each of the quadrats in the Governor's Land study area. The extent of swamps and agricultural fields within each quadrat was noted by using the same method as for the classification into geomorphological strata. Also the amount of each quadrat that was not available for survey because of either development, marshland, surface water, or that were partially outside of the survey area was recorded for each potential sampling unit. If a quadrat was found to contain more than 15 test units that were not available for survey then that quadrat was removed from the sample population and thus from survey consideration. This requirement was made to ensure that only quadrats with economically adequate

areas for potential survey were included in the stratified random sample.

Surface Water Setting: The relationship of a quadrat to instances of surface water was noted during the stratification process. Surface water was defined as either primary, secondary or intermittant associations. Junctions between surface water settings were also noted during the classification of each quadrat which simply consisted of recording the presence of any examples of surface water within the potential sampling unit.

The classification of the potential Governor's Land sampling units into strata based on geomorphology, soil association, and surface water setting revealed patterns on the landscape which influenced the implementation of this archaeological survey. As said before, it was noticed that the areas of the Levy-Pamunkey-Dogue soil association contained all the areas now in agricultural production at the Governor's Land. In addition, these agricultural fields were

equated with the "lowland" geomorphological strata.

Because of the relative ease of archaeological survey in agricultural fields, when compared with woodland survey, and because of the limited time available during the spring for survey, it was decided that this particular soil association could be better surveyed using the traditional archaeological survey techniques of surface collection and test pits.

The Governor's Land Archaeological Survey was thus divided into two parts; the first, a probabilistic survey of the forests associated with Peawick-Emporia-Levy soils and the highland and transitional geomorphological areas, the second, a traditional survey of the agricultural fields associated with the Levy-Pamunkey-Dogue soils and the lowlands physiographic zone. Thus, for the purposes of this survey, the areas now in agricultural production at Governor's Land were considered as being representative of the Levy-Pamunkey-Dogue soil association and the "lowland" geomorphological strata.

Archaeological surveys using the techniques of surface collection in plowed fields and occasional test pits in "likely" areas can be characterized as "purposive" surveys. These types of surveys which use an archaeologist's knowledge in an unsystematic fashion, such as this methodology, can not, however, be called "random" with any statistical validity. Purposive or "hunch" surveys are generally much more common in archaeology than probabilistic surveys because of their ease of implementation even though purposive survey methodologies do not necessarily give both representative and reliable information on the occurrence of archaeological site locations.

The purposive archaeological methodology that was used on the present agricultural fields at Governor's Land consisted of surface collection of plowed fields during the early spring before the ground surface was covered with vegetation. Non-systematic test pits were placed in "likely" areas of the fallow fields found in the areas near Barret's Point. These "likely" areas were characteristically higher spots of ground which

are thought to be choice places for settlement in both aboriginal and historic times. Test Pits averaged 2 by 2 feet in size and were excavated to the bottom of the plowzone in order to reveal any subsurface features. When found, these features were related to known points on the landscape using the Brunton compass and a tape. Soil from these test units was screened through 1/4 inch mesh screen and any artifacts found were collected.

In addition, purposive survey of the lowland geomorphological strata included a walkover survey along the complete extent of the shoreline running the length of Governor's Land from the Shell Bank Creek inlet to Barret's point and then up the Chickahominy and along its beaches to the end of the study area. The purpose of this beach survey was to identify possible areas of extensive erosion that were threatening archaeological remains.

While purposive survey techniques were well suited for the agricultural fields present at Governor's Land

probabilistic techniques are be better suited for survey in the forested areas of the study region. Consideration of the the dominately wooded areas of Governor's land for archaeological survey is also advantageous because this is the area that is most immediately threatened with disturbance from development activities.

Thus, the application of the probabilistic survey methodology developed in this thesis was restricted to the area of Peawick-Emporia-Levy soil association. This decision limited the number of environmental strata necessary for consideration in the stratified random sample proposed in this research. Using the methodlology found in Plog (1976:137) a 7.5 percent stratified random sample was drawn from those quadrats included in the Peawick-Emporia-Levy soil association. This survey may therefore be thought of as being representative of this particular soil association which includes a majority of both the highland and transitional geomorphological strata. The 7.5 percent sampling fraction was chosen by convenience and

resulted in a sampled population of 10 quadrats from 138 quadrats in the potential sample population. The location of the quadrats chosen for survey are listed below.

336,000N/2,487,000E	338,000N/2,482,500E
336,500N/2,487,000E	337,500N/2,488,500E
337,500N/2,487,500E	337,000N/2,486,500E
339,000N/2,488,500E	336,500N/2,487,000E
338,000N/2,489,000E	338,500N/2,483,500E

The probabilistic survey "field" methodology for the Governor's Land archaeological survey began with the location of the randomly selected quadrats on the James City County Planning map. Quadrats chosen for archaeological survey were located in the woods by means of a graduated tape measure and a Brunton compass using known reference points so to tie movement in the forest into locations on the base map. Once a quadrat was located on the landscape the compass and tape were then used again to lay out the locations of the 25 systematically placed test units. Numbered flags were

placed at the location of each of the test units. Quadrats were referred to by the coordinates of their southwest corner and flags were numbered sequentially beginning in that corner.

Examination of each test location consisted of the excavation of a shovel test pit (STP) which characteristically measured one foot square. Soil from each unit was screened as in the purposive survey and examples of culture material were bagged with the location of the quadrat and the test unit number recorded on the bag. Excavation of shovel test pits differs from Lovis' (1976) sampling methodology because of the potential of formerly plowed fields at Governor's Land. Shovel tests were excavated to the bottom of plow zone, if present, or to a depth of about one foot otherwise. The excavation of cubic units should give an adequate representation of any culture material present in a given location.

Stratigraphic profiles were drawn from each shovel test using the form shown in Figure 5. A standard

engineer's scale of feet divided into tenths was used to record the stratigraphic profiles. In addition, Munsell soil colors were recorded from each layer as were United States Department of Agriculture soil textural estimations. In areas of potential buried surfaces a 3 inch bucket auger was used to identify the presence of these landscapes. However, there were few of these areas present on the portion of the Governor's Land surveyed with this probabilistic technique.

Through the use of these two methodologies, purposive and probabilistic, the study area defined in this thesis was surveyed on weekends during the spring of 1983. The results of this survey, a test of the forest survey methodology and suggestions for the improvement of future similar locational archaeological surveys will be presented in the next chapter.

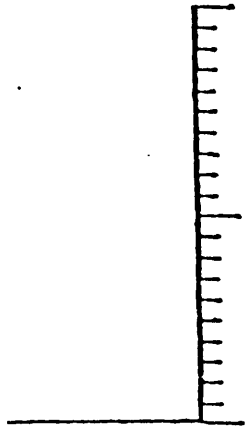
The College of William and Mary
Governor's Land Archaeological Survey
Shovel Test Form

ion: N _____ E _____ STP# _____

N.B.: All Measurements
Are Below Surface.

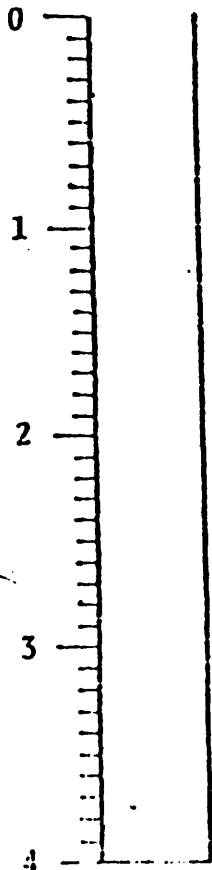
Test Profile

Soils Descriptions



Auger Profile

Soils Descriptions



Comments

CHAPTER 3

Survey Results

In general the results of the 1983 Governor's Land Archaeological Survey were encouraging. A large, formerly unsurveyed, region of James City County, Virginia has now been the subject of extensive archaeological investigation. This research effort has produced considerable amounts of information about the archaeological research potential of the area. The sites that were found in this survey have also added to the general body of archaeological data from Tidewater Virginia in regards to the understanding of historic and prehistoric settlement pattern.

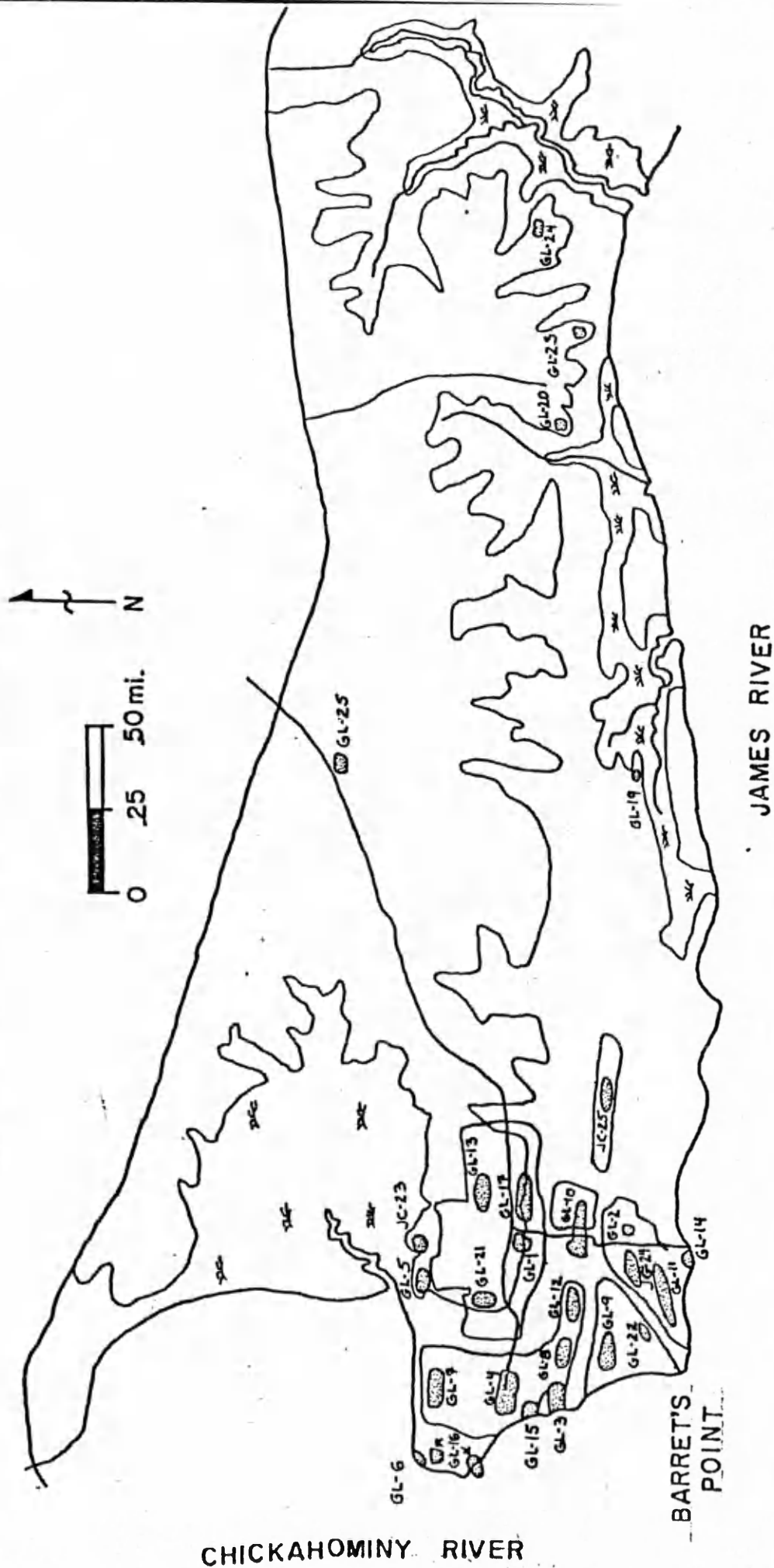
In all some 25 sites were found during this archaeological survey: 7 had prehistoric components only, 12 dated only from the historic period, and 6 had both historic and prehistoric artifacts present. Figure 6 shows the location of the sites found in this survey and includes sites that were found in the

purposive archaeological survey which continued during the summer and fall of 1983. Copies of the VRCA site files for each of these sites can be found in Appendix A.

It is tempting to compare the results of the two archaeological survey methodologies used in this project. Such a comparison would find that the purposive methodology of walkover surface collection and shovel testing found many more sites than the probabilistic technique used in the forest at Governor's Land. This contrast would be misleading, however, because each survey technique was used to test different environments found within the survey region. It is natural to expect differing environments present at Governor's Land to contain differing densities of archaeological sites

In addition, comparison of the results of probabilistic versus purposive survey techniques is not valid because of the biases inherent in each strategy. Purposive techniques rely on the judgement of the

FIGURE 6. SITE LOCATIONS



archaeologist as to the most "likely" locations for archaeological sites will be. This means that purposive surveys only look at areas where traditional wisdom indicates the potential location of an archaeological site. This methodology has also been shown to be biased against environmental characteristics (Brose 1976). Purposive survey techniques are therefore self-supporting and biased in the information they present. Thus, even though large numbers of sites are found, the quality or representative nature of this information cannot be accurately accounted for when using purposive survey methods. However, the relatively large numbers of sites found by purposive techniques may perhaps suggest the range of variation in site type, form, and location present at Governor's Land.

Probabilistic survey techniques also have inherent biases which influence the types of information found. This methodology, however, is better at elucidating these biases through the explicit presentation of survey methodology. With probabilistic survey the

extent and reasons for each excavation, test, or auger hole is recorded so that the quality of the data source may be evaluated by other archaeologists.

The greatest reason that probabilistic and purposive techniques cannot be compared through the numbers of sites found is that probabilistic survey is designed to find representative collections of archaeological sites rather than just as many sites as possible. Thus, even though the probabilistic technique found fewer sites than the purposive technique, this information can be used to predict other site locations within the area surveyed by this method.

When taken together, the results of these two methodologies should provide adequate amounts of information from which to describe the types and periods of settlement found in the Governor's Land region. However, before this interpretation is presented a test of the "field" methodology used in the probabilistic section of this survey will be presented.

The test of the field methodology used in the probabilistic survey undertaken in the forests at Governor's Land was made because so few sites were being found using this technique. In addition, the 100 foot sampling interval had been criticised because it was thought that sites would be missed using this distance between test units. Thus, this field methodology was applied to the area of a known site in order to test its efficiency at finding cultural material in the plowzone.

Site 44-JC-160 (GL-10) was used to perform this test. This site was found during the purposive section of the spring survey of Governor's Land and is located in a fallow field approximately 400 by 500 feet in area. Twenty shovel test pits were placed systematically 100 feet apart within the field. These shovel test units followed the recording processes outlined for the probabilistic survey. Three shovel tests revealed cultural material in the area identified as the location of site 44-JC-160. Subsequent excavation of this site by the 1983 Governor's Land

Archaeological Field School has indicated that 44-JC-160 consists of several eighteenth century downscale domestic structures with very low artifact densities.

In addition to the shovel test procedure, a test of ph was made at each of the test locations to see if this information was helpful in determining site location. A small sample of plowzone soil was taken from each shovel test and the number of the test was recorded. A test for ph level was performed from each sample in the laboratory. The results of these tests, which are presented in Figure 7, indicate that ph levels tended to be higher near the areas of site location. This area of higher ph also coincides with the three shovel test pits in which cultural material was found. Further work is necessary in order to determine the relationship between site location and ph levels, although these results are promising.

These favorable results from this test of the probabilistic survey field methodology suggest that

this technique for recovering archaeological materials and identifying site location is efficient and comprehensive within the 500-foot quadrats used as the sampling unit of the probabilistic survey. Further, this test of the method confirms the utility of this design for finding sites, even of low artifact density, in the low surface visibility of forested environments.

This test of the field methodology developed for use in the forests of Governor's Land leads to an evaluation of probabilistic sampling techniques in archaeological surveys. The results of this study indicate that probabilistic sampling is ideal for locational surveys in areas of restricted surface visibility. This methodology could thus be applied to other areas of Tidewater, Virginia where forest cover dominates the landscape.

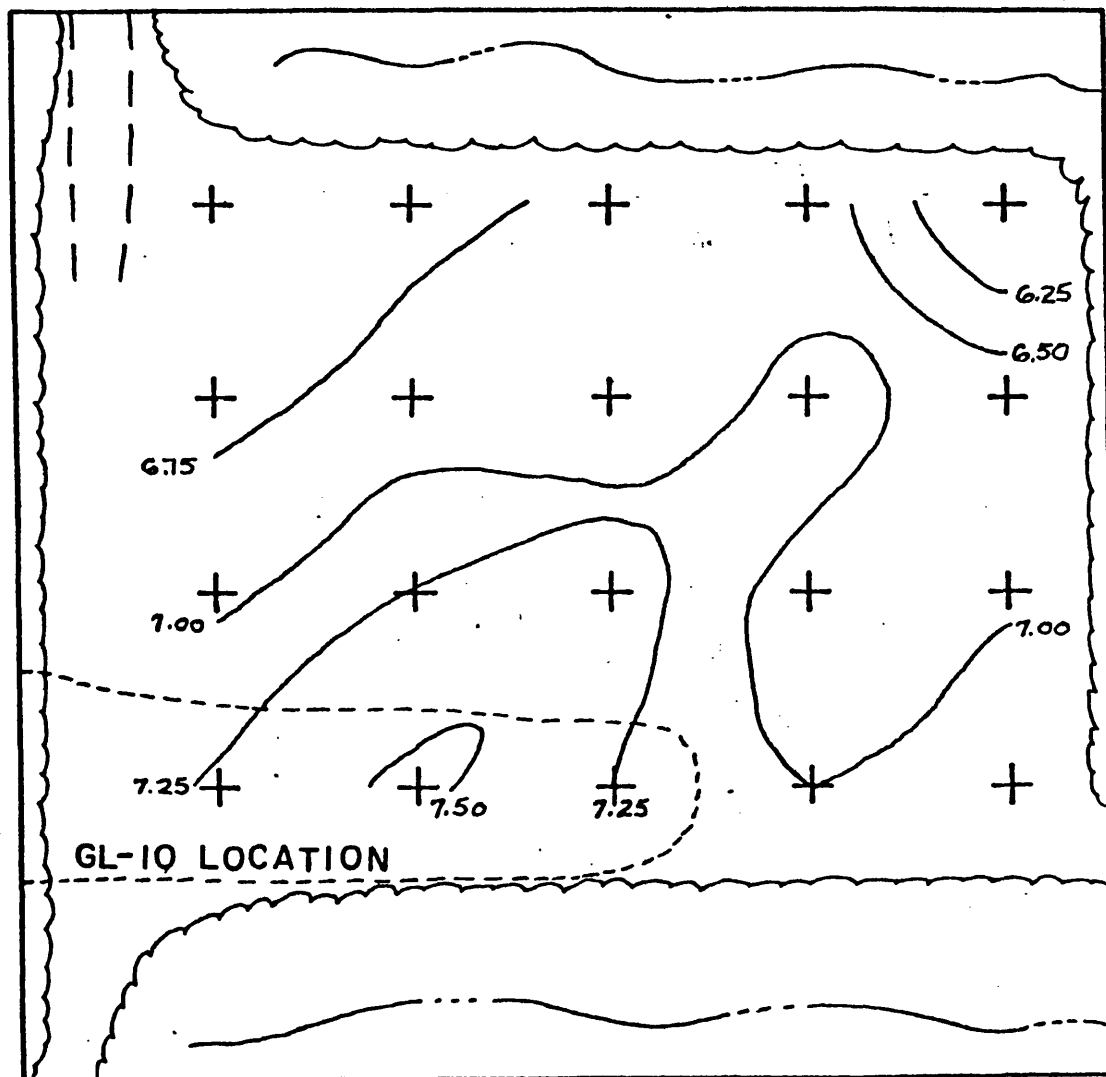
Improvement of probabilistic sampling methods would be greatly advanced through the development of a sampling simulation for this region. A simulation study comparing different survey strategies could be

applied to an area of comprehensive survey in order to test each method's efficiency for finding representative collections of archaeological sites. Such a study would greatly benefit archaeological research in this region and others with similar environmental characteristics.

The dependance of most probabilistic techniques on environmental stratification necessitates accurate and complete reconstruction of past landforms and environments. At Governor's Land the survey results cannot be totally understood without considering the destructive effect that shoreline erosion has had on sites in this area. This erosion is thought to have destroyed most seventeenth century remains as well as several eighteenth century sites (as for example GL-14). Environmental reconstruction should therefore be an important part of the groundwork for a probabilistic survey.

Another area that was found lacking in the probabilistic sampling design used at Governor's Land

FIGURE 7. METHODOLOGY TEST RESULTS



was the determination of the spatial, temporal, and functional characteristics of sites found during the survey. This problem was, however, also noticed in the "purposive" portion of the survey. In general then, a specific methodology needs to be developed, once a site is located, to determine its temporal range, possible function, and overall size. This information is necessary in order to determine the potential archaeological significance of these resources.

A final consideration may be added to improve the effectiveness of probabilistic survey in Tidewater Virginia. In addition to the culturally relevant factors of geomorphology, soil association, and surface water setting, the presence of historic roads should be added as a part of the stratification process. In this way the full power of historic documentation (maps and other records) could be brought to bear in locating archaeological sites. Once installed on the landscape roads act as environmental features in much the same way as does surface water setting, in that both are generally linear features that tend to vary little in

location over time. It does seem that the probabilistic portion of the Governor's Land archaeological survey would have benefitted if the presence or absense of historic roads had been used in the stratification process.

With these suggestions for the improvement of probabilistic sampling designs stated an interpretation of the historic and prehistoric settlement pattern at Governor's Land is now possible. Settlement at Governor's land relates directly to the environmental features of the landscape. This pattern reflects the environmental stratification process used in the probabilistic sampling design and the subsequent survey of the region by two different research designs. Site locations found in the purposive portion of this survey are more directly related to the unstated and unsystematic biases of the archaeologists. Because most of the sites were found by the purposive survey methodology the specific conclusions about settlement pattern in this region must be treated with caution.

Prehistoric sites fall into two functional classifications: lithic reduction base camps and hunting stations. Sites such as GL-3, 4, 6, and 15 seem to have functioned as lithic reduction base camps. These sites are focused on primary surface water settings, presumably in order to access the secondary lithic sources present in the James and Chickahominy Rivers. Lithic reduction base camps are generally large sites with considerable lithic debitage illustrating long-term occupations. Artifacts (such as broken-in-manufacture preforms, large flakes with cortex, and flaked cobbles) suggested the probable function of these sites as stone procurement and manufacture locations. Lithic reduction base camps at Governor's Land are only located on Levy-Pamunkey-Dogue soils and in the lowland geomorphological zone.

Hunting stations at Governor's Land have a wider distribution across the landscape. The name "hunting station" refers to what might also be called "resource procurement sites," a name which describes the general function of these smaller more specialized sites.

These sites were identified through the presence of either complete or discarded projectile points, and small-sized flakes, and fire cracked rock. Certain hunting stations (GL-5 and 17) were located on Levy-Pamunkey-Dogue soils and in the highland geomorphological strata. These two sites were both located on the very edge of the highland and transitional geological zones overlooking lowland areas. Generally, intermittent streams were associated with these sloped areas. Other hunting stations (GL-7, 9, 10, 12, and 44-JC-25) were located on higher areas of ground in the lowland geological strata within the Levy-Pamunkey-Dogue soil association. These sites were close to poorly drained areas and intermittent streams.

Additional hunting stations were located in the Peawick-Emporia-Levy soil association areas. Although not recorded as sites because of the limited artifactual evidence (only small amounts of fire-cracked rock were found), these hunting stations were located during the probabilistic forest survey in environments similar to GL-17 and GL-5. Both of the

unofficially recorded hunting stations were located on the edge of the highland-transitional zones overlooking lowland areas. These sites were also associated with intermittant streams.

Missing from the list of prehistoric sites found at Governor's Land are large agricultural base camps. Pottery was found only at GL-4 and subsequent excavation at GL-6 and GL-10 revealed several small pieces. The absence of clear evidence for large Woodland period sites is probably a result of the large amounts of Governor's Land that have eroded into the James River since Woodland period occupations.

The historic site settlement pattern of Governor's Land may be broken down into two groups based on ceramic and pipe-stem temporal divisions. Seventeenth and eighteenth-century sites (GL-10, 11, 14?, 22, and 44-JC-24) were located only in the purposive portion of the Governor's Land survey. This means that these sites were located in the lowland geological zone, on Levy-Pamunkey-Dogue soils, and near intermittant or

primary surface water settings. One eighteenth-century site (GL-21) was located in the highland geomorphological strata and may be associated with the historic road leading to Barret's Ferry on the Chickahominy River. Most early sites at Governor's Land seemed to be domestic-agricultural residence locations and were usually found on the higher ridges of the fields where purposive testing took place.

Nineteenth and twentieth-century sites at Governor's Land form the other temporal classification. These sites can be further divided into two functional classifications: domestic and industrial sites. Domestic nineteenth-century sites (GL-1, 4, 5, 8, 12, 19, 21, 23, 24) were found in most every environmental cluster, present at Governor's Land. These small farming residences were located on both soil associations and in both the highland and lowland geologic strata. In the purposive survey these sites were identified by clusters of period domestic ceramics located during surface collection. In the forest survey these types of sites were found because of

standing remains and artifacts excavated in shovel tests. A review of historic maps, available at the Virginia Research Center for Archaeology, suggested that nineteenth century domestic sites were often associated with the location of road features formerly present on Governor's Land.

The second type of nineteenth and twentieth-century sites can be classified as industrial in function. These two sites (GL-16 and GL-25), according to our able informants Norman and John Hofmeyer, were both a part of a logging operation that once took place on the Governor's Land. Site GL-16 is at the location of the saw mill and wharf where the trees brought in from the interior on a narrow guage railroad were milled and then floated down river. GL-25 was the logging company's store and storage facilities which was located close to the main road to Williamsburg and Charles City.

In sum, the settlement pattern exhibited by the sites found during the 1983 Governor's Land

archaeological survey illustrate the importance of environmental characteristics in determining both prehistoric and historic site locations. Soils, geomorphology, and surface water setting, as well as historic roads, can be seen as significant factors for locating sites through time. Use of these environmental variables in the stratification of a archaeological survey region (before survey) would aide in the efficiency of that survey.

It is hoped that this research effort has provided a competent evaluation of the use of probabilistic sampling for archaeological survey in Tidewater, Virginia. The combination of purposive and probabilistic survey methodologies to survey the 1400 acres of the predominately forested Governor's Land has shown the advantages and disadvantages of each technique. The accomplished purpose of this research was to design, implement, and report on a efficient technique for regional archaeological survey under the difficult conditions present at Governor's Land.

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-1)

Site number: 44-JC-129

Type of site: Domestic: Tenant Farmer Residence

Cultural affiliation: Historic: 19thc.

Map reference: USGS Surry 71/2' Quad

Latitude ° ' " north. Longitude ° ' " west.
U.T.M. Zone Easting Northing .
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear, Inc., Tower Box 66, 2101 Executive Dr. Newport News, Va

Tenant/address: H. & J. Hofmeyer, Tomahund Plantation, Charles City, VA 23666

Attitude toward investigation: excellent

Informant/address: Hofmeyers (above)

Surveyed by: T. R. Reinhart, J. H. Sprinkle

Date: 4-3-83

General surroundings: Plowed fields. Located at fork in road leading to Rt. 5 and Barret's Point.

Nearest water: nature, direction and distance: Intermittant stream 100yds down slope, due south.
Chickahominy River .5 miles due west.

Dimension of site: Unknown. Surface scatter extends along road leading westward several hundred feet.

Description: depth, soil, collecting conditions: Surface collection in blowed field with emerging wheat crop. Heaviest concentration of artifacts in areas adjacent to road intersection. Soil here is stained black as if from a fire.

Specimens collected: kinds, quantities, materials: Historic ceramics (19th and 20th C.), buttons (2), glass, some oxidized pieces of iron.

Specimens reported, owners, address: Department of Anthropology, College of William and Mary.

Other documentation: reports, historical data: Informants remember standing structure at location

Condition: erosion, cultivation, excavation, construction:

Recommendations: Systematic surface collection to identify spatial and temporal ranges.

Photo: None

Recorded by: J. H. Sprinkle, Jr.

Map: None

Date: 1-11-84

(Use reverse side of sheet and additional pages for sketches of site and artifacts)

County

Map Sheet

Site Number

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-2)

Site number:

Type of site: Historic Findspot

Cultural affiliation: Historic

Map reference: Surry USGS 7½' Quad

Latitude 0 " north. Longitude 0 " west.
U.T.M. Zone Easting Northing .
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear, Inc., Tower Box 66, 2101 Executive Dr. Newport News, VA

Tenant/address: H. & J. Hofmeyer, Tomahund Plantation, Charles City, VA 23666

Attitude toward investigation: Excellent

Informant/address: Hofmeyers (above)

Surveyed by: T. R. Reinhart and Sons

Date: Spring 1983

General surroundings: Fallow Field, located on eastern side of south fork of Barret's Point Road. Field extends south to James River.

Nearest water: nature, direction and distance: James River c. 700 ft. south. Intermittant stream 200 ft. to the north.

Dimension of site: Unknown

Description: depth, soil, collecting conditions: Fallow field restricted visibility during survey. Only one piece of buff-bodied salt-glazed stoneware was found.

Specimens collected: kinds, quantities, materials: One pc. salt-glazed stoneware.

Specimens reported, owners, address: Depart of Anthropology, College of William and Mary.

Other documentation: reports, historical data: None except that area is close to that described as "Piney Grove" on various historic maps on file at VRCA.

Condition: erosion, cultivation, excavation, construction: Cultivation and fallow; Land on market and will eventually be developed.

Recommendations: Surface collection and shovel testing during better conditions.

Photo: None
Recorded by: J. H. Sprinkle, Jr.

Map: None
Date: 11-11-84

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-3)

Site number: 44-JC-159

Type of site: Lithic Reduction Station

Cultural affiliation: Prehistoric

Map reference: USGS Surry 7 $\frac{1}{2}$ ' Quad

Latitude ° ' " north. Longitude ° ' " west.
U.T.M. Zone Easting Northing
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear Inc, Tower Box 66, 2101 Executive Dr. Newport News, VA

Tenant/address: H. & J. Hofmeyer, Tomahund Plantation, Charles City, VA. 23666

Attitude toward investigation: excellent

Informant/address:

Surveyed by: T. R. Reinhart, J. H. Sprinkle, Jr.

Date: 4-3-83

General surroundings: Plowed field with grove of trees to the north, water to the west, and forest and swamp to the south. More fields to the east.

Nearest water: nature, direction and distance: 150 ft. west to the Chickahominy River

Dimension of site: ca. 100 ft. (east-west) by 50 ft. (north-south)

Description: depth, soil, collecting conditions: surface collection revealed chipped stone, no ceramics, Emerging wheat in fields.

Specimens collected: kinds, quantities, materials: stemmed points, biface fragments, misc. flakes.

Specimens reported, owners, address: Department of Anthropology, College of William and Mary

Other documentation: reports, historical data:

Condition: erosion, cultivation, excavation, construction:

Recommendations: Shovel tests to identify subsurface features, intensive surface collection

Photo: None

Recorded by: J. H. Sprinkle, Jr.

Map: None

Date: 1-11-84

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-4)

Site number:

Type of site: Lithic reduction Base camp/Unknown

Cultural affiliation: Prehistoric/Historic

Map reference: Surry USGS 7 $\frac{1}{2}$ ' Quad

Latitude ° ' " north. Longitude ° ' " west.
U.T.M. Zone Easting Northing
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear, Inc., Tower Box 66, 2101 Executive Dr., Newport News, VA

Tenant/address: H. and J. Hofmeyer, Tomahund Plantation, Charles City, VA

Attitude toward investigation: Excellent

Informant/address: Hofmeyers (above)

Surveyed by: T. R. Reinhart and Sons

Date: 4-3-83

General surroundings: Plowed fields along both sides of north fork of Barret's Point Road.
Site extends from Chickahominy River inland.

Nearest water: nature, direction and distance: Directly adjacent to Chickahominy River.

Dimension of site: Unknown

Description: depth, soil, collecting conditions: Surface collection done in plowed fields with
emerging wheat crop. (good visibility)

Specimens collected: kinds, quantities, materials: whiteware, transferprint, prehistoric ceramics,
triangular projectile point base and archaic projectile point.

Specimens reported, owners, address: Department of Anthropology, College of William and Mary

Other documentation: reports, historical data:

Condition: erosion, cultivation, excavation, construction:

Recommendations: Site should be surface collected to determine size and shovel tested
for subsurface features.

Photo: None
Recorded by: J. H. Sprinkle, Jr.

Map: None

Date: 1-11-84

(Use reverse side of sheet and additional pages for sketches of site and artifacts)

County

Map Sheet

Site Number

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-5)

Site number:

Type of site: Unknown

Cultural affiliation: Historic/Prehistoric?

Map reference: Surry USGS 7 $\frac{1}{2}$ ' Quad

Latitude ° ' " north. Longitude ° ' " west.
U.T.M. Zone Easting Northing .
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear Inc., Tower Box 66, 2101 Executive Dr., Newport News, VA

Tenant/address: H. and J. Hofmeyer, Toamhund Plantation, Charles City, VA

Attitude toward investigation: Excellent

Informant/address:

Surveyed by: T. R. Reinhart and Sons

Date: 4-3-83

General surroundings: Northern edge of plowed field, surrounded on three sides by forest.

Nearest water: nature, direction and distance: 500 ft. north to primary stream (un-named)
600 ft. northwest to Chickahominy River.

Dimension of site: Unknown

Description: depth, soil, collecting conditions: Surface collection of field found artifacts. A depression (well?) was located several hundred feet west of the field scatter on the edge of a ridge in the forest.

Specimens collected: kinds, quantities, materials: whiteware sherds

Specimens reported, owners, address: Department of Anthropology, College of William and Mary

Other documentation: reports, historical data: Reported earlier as 44-JC-23, which is supposed to be a prehistoric site.

Condition: erosion, cultivation, excavation, construction:

Recommendations: Surface collection and shovel testing for intact features and better spatial and temporal definition.

Photo: none

Recorded by: J. H. Sprinkle, Jr.

Map: None

Date: 1-11-84

(Use reverse side of sheet and additional pages for sketches of site and artifacts)

County

Map Sheet

Site Number

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-6)

Site number: 44-JC-161

Type of site: Lithic Reduction Station

Cultural affiliation: Prehistoric

Map reference: Norge USGS 7 $\frac{1}{2}$ ' Quad

Latitude 0 " north. Longitude 0 " west.
U.T.M. Zone Easting Northing
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear Inc. Tower Box 66, 2101 Executive Drive, Newport News

Tenant/address: N. and J. Hofmeyer, Tomahund Plantation, Charles City VA

Attitude toward investigation: Excellent

Informant/address:

Surveyed by: T. R. Reinhart, J. H. Sprinkle, Jr.

Date: Spring, 1983

General surroundings: On the beach at the tip of the first peninsula near the mouth of the Chickahominy R. (Up river from Barret's Point).

Nearest water: nature, direction and distance: Ancient meander of the Chickahominy R. adjacent.

Dimension of site: Unknown. Site extends perhaps 100' along point of land and artifacts were found up to 50' into the water.

Description: depth, soil, collecting conditions: Site was found during shoreline survey of surface. Lithics were found along beach and into the water. Subsequent excavations suggest that the artifacts are eroding out of the adjacent bank (upper 1' of soil).

Site was tested by 1983 William and Mary Field School.

Specimens collected: kinds, quantities, materials: 2 Savannah River Points, various chipped stone flakes and partially reduced cobbles.

Specimens reported, owners, address: Department of Anthropology, College of William and Mary

Other documentation: reports, historical data: None

Condition: erosion, cultivation, excavation, construction:

Recommendations: None

Photo: None

Recorded by:

J. H. Sprinkle, Jr.

Map: None

Date:

2-20-84

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-7)

Site number:

Type of site: Surface Scatter

Cultural affiliation: Prehistoric

Map reference: 7 $\frac{1}{2}$ ' USGS Quad

Latitude ° ' " north. Longitude ° ' " west.
U.T.M. Zone Easting Northing
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear Inc., Tower Box 66, 2101 Executive Dr., Newport News, VA

Tenant/address: H. and J. Hofmeyer, Tomahund Plantation, Charles City, VA

Attitude toward investigation: Excellent

Informant/address:

Surveyed by: T. R. Reinhart and J. H. Sprinkle, Jr.

Date: Spring, 1983

General surroundings: Plowed fields, scatter located near northern edge of field north of north fork of Barret's Point road;

Nearest water: nature, direction and distance: Ancient meander of Chickahominy River north c. 200 ft.

Dimension of site: unknown

Description: depth, soil, collecting conditions: Surface collection of plowed field

Specimens collected: kinds, quantities, materials: Department of Anthropology, College of William and Mary

Specimens reported, owners, address:

Other documentation: reports, historical data:

Condition: erosion, cultivation, excavation, construction:

Recommendations: Testing to determine spatial, temporal, and functional limitations of site.

Photo: None

Recorded by: J. H. Sprinkle, Jr.

Map: None

Date: 1-11-84

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-8)

Site number:

Type of site: Surface Scatter

Cultural affiliation: Historic/prehistoric

Map reference: Surry USGS 7 $\frac{1}{2}$ ' Quad

Latitude " ' " north. Longitude " ' " west.
U.T.M. Zone Easting Northing .
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear Inc., Tower Box 66, 2101 Executive Drive, Newport News, VA

Tenant/address: M. and J. Hofmeyer, Tomahund Plantation, Charles City, Va

Attitude toward investigation: Excellent

Informant/address:

Surveyed by: T. R. Reinhart, J. H. Sprinkle, Jr.

Date: Spring, 1983

General surroundings: Plowed fields extending eastward from the Chickahominy River

Nearest water: nature, direction and distance: 200 yds. west to Chickahominy River.

Dimension of site: Unknown

Description: depth, soil, collecting conditions: Surface collection of plowed fields

Specimens collected: kinds, quantities, materials:

Specimens reported, owners, address: Department of Anthropology, College of William and Mary

Other documentation: reports, historical data:

Condition: erosion, cultivation, excavation, construction:

Recommendations: Testing to determine spatial, temporal and functional limits of site.

Photo: none

Recorded by: J. H. Sprinkle, Jr.

Map: none

Date: 1-11-84

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-9)

Site number:

Type of site: Surface scatter

Cultural affiliation: Prehistoric

Map reference: Surry USGS 7 $\frac{1}{2}$ ' Quad

Latitude 0 " north. Longitude 0 " west.
U.T.M. Zone Easting Northing .
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear Inc., Tower Box 66, 2101 Executive Dr., Newport News, VA

Tenant/address: W and J. Hofmeyer, Tomahund Plantation, Charles City, Va

Attitude toward investigation: Excellent

Informant/address:

Surveyed by: P. R. Reinhart, J. H. Sprinkle, Jr.

Date: Spring, 1983

General surroundings: located on the northern edge of the plowed fields immediately adjacent to Barret's Point, on the Chickahominy River Side.

Nearest water: nature, direction and distance: Chickahominy River, 100 yds. due west.

Dimension of site: Unknown

Description: depth, soil, collecting conditions: surface collection of fallow field. low surface visibility.

Specimens collected: kinds, quantities, materials:

Specimens reported, owners, address: Department of Anthropology, College of William and Mary

Other documentation: reports, historical data:

Condition: erosion, cultivation, excavation, construction:

Recommendations: Surface collection under better conditions.

Photo: None

Recorded by: J.H. Sprinkle, Jr.

Map: None

Date: 1-11-84

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-10)

Site number: 44-JC-160

Type of site: Domestic Structures?/Hunting Station?

Cultural affiliation: Historic 18thC.?
Prehistoric

Map reference: Surry USGS 7 $\frac{1}{2}$ ' Quad

Latitude ° ' " north. Longitude ° ' " west.

U.T.M. Zone Easting Northing .

(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear, Inc., Tower Box 66, 2101 Executive Dr. Newport News

Tenant/address: H. and J. Hofmeyer, Tomahund Plantation, Charles City, Va

Attitude toward investigation: excellent

Informant/address:

Surveyed by: T. R. Reinhart, J. H. Sprinkle, Jr.

Date: Spring, 1984

General surroundings: Plowed field, approx. 400'(N-S) by 500'(E-W) with woods and poorly drained swamps and streams surrounding sites. Sites are located on small rise (approx. 10+') in the southern part of the field. This rise is a linear ridge which runs E-W and is larger toward the west where it enters the woods.

Nearest water: nature, direction and distance: James River is .25 miles due south.

Dimension of site: Unknown

Description: depth, soil, collecting conditions: Site was found with shovel testing. Subsurface features were discovered.

Specimens collected: kinds, quantities, materials: limited artifact density. Mean ceramic date is about 1770, possibly earlier. Rogers, and other wares present.

Specimens reported, owners, address: College of William and Mary, Department of Anthropology

Other documentation: reports, historical data: None. Possibly associated with Piney Grove Site was tested by 1983 William and Mary Field School.

Condition: erosion, cultivation, excavation, construction:

Recommendations: Site is unusual and possibly should be considered for National Register.

Photo: None

Map: None

Recorded by: J. H. Sprinkle, Jr.

Date: 2-20-84

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-11)

Site number:

Type of site: Surface Scatters and Subsurface Features Cultural affiliation: Historic
Domestic ?

Map reference: Surry, USGS 7 $\frac{1}{2}$ ' Quad

Latitude 0 " north. Longitude 0 " west.
U.T.M. Zone Easting Northing
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear Inc, Tower Box 66, 2101 Executive Dr. Newport News, Va

Tenant/address: H. and J. Hofmeyer, Tamohund Plantation, Charles City, Va

Attitude toward investigation: Excellent

Informant/address:

Surveyed by: T. R. Reinhart, J. H. Sprinkle, Jr.

Date: Spring, 1933

General surroundings: Plowed fields. Site is along a ridge of higher ground that runs parallell to the James River on Barret's Point peninsula.

Nearest water: nature, direction and distance: James River, varries from 100 to 200 yrds south.

Dimension of site: unknown

Description: depth, soil, collecting conditions: surface collection in fallow field with purposive shovel testing.

Specimens collected: kinds, quantities, materials: Brick bits, unidentified metal blobs, and black wine bottle glass were found in shovel tests. Possible post hole/mold feature also found.

Specimens reported, owners, address: Department of Anthropology, College of William and Mary.

Other documentation: reports, historical data:

Condition: erosion, cultivation, excavation, construction:

Recommendations: Extensive testing to determine site function and temporal occupation.

Photo: None

Map: None

Recorded by: J. H. Sprinkle, Jr.

Date: 1-11-34

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-12)

Site number:

Type of site: Surface scatter

Cultural affiliation: Historic/Prehistoric

Map reference: Surry USGS 7 $\frac{1}{2}$ ' Quad

Latitude 0 " north. Longitude 0 " west.
U.T.M. Zone Easting Northing .
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear, Inc., Tower Box 66, 2101 Executive Dr., Newport News, Va.

Tenant/address: H. and J. Hofmeyer, Tomahund Plantation, Charles City, Va

Attitude toward investigation: Excellent

Informant/address:

Surveyed by: T. R. Reinhart, J. H. Sprinkle, Jr.

Date: Spring, 1983

General surroundings: plowed fields surrounded by intermittent streams and forests.

Nearest water: nature, direction and distance: intermittent streams running east/west are to the north and south c. 50 yds, from the site.

Dimension of site: Unknown

Description: depth, soil, collecting conditions: surface collection in plowed field with emerging wheat crop.

Specimens collected: kinds, quantities, materials:

Specimens reported, owners, address: Department of Anthropology, College of William and Mary

Other documentation: reports, historical data:

Condition: erosion, cultivation, excavation, construction:

Recommendations: testing to evaluate site significance

Photo: None

Recorded by: J. H. Sprinkle, Jr.

Map: None

Date: 1-11-84

(Use reverse side of sheet and additional pages for sketches of site and artifacts)

County

Map Sheet

Site Number

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-13)

Site number:

Type of site: Hunting Station (Surface Scatter)

Cultural affiliation: Prehistoric

Map reference: Surry USGS 7 $\frac{1}{2}$ ' Quad/ Norge Quad

Latitude 0 " north. Longitude 0 " west.
U.T.M. Zone Easting Northing .
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear Inc., Tower Box 66, 2101 Executive Dr. Newport News, Va

Tenant/address: H. and J. Hofmeyer, Tanohund Plantation, Charles City, Va

Attitude toward investigation: Excellent

Informant/address:

Surveyed by: T. R. Reinhart, J. H. Sprinkle

Date: Spring, 1983

General surroundings: plowed fields intersected by possible springs which form intermittent streams

Nearest water: nature, direction and distance: adjacent intermittent streams

Dimension of site: unknown

Description: depth, soil, collecting conditions: surface collection in plowed field with emerging wheat.

Specimens collected: kinds, quantities, materials:

Specimens reported, owners, address: Department of Anthropology, College of William and Mary

Other documentation: reports, historical data:

Condition: erosion, cultivation, excavation, construction:

Recommendations: None

Photo: None

Recorded by: J. H. Sprinkle, Jr.

Map: None

Date: 1-11-84

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: Piney Grove (G1-14)

Site number:

Type of site: Domestic?

Cultural affiliation: Historic

Map reference: Surry USGS 7¹/₂ Quad

Latitude " " north. Longitude " " west.
U.T.M. Zone Easting Northing .
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear Inc., Tower Box 66, 2101 Executive Dr. Newport News, VA

Tenant/address: H. and J. Hofmeyer, Tomahund Plantation, Charles City, VA

Attitude toward investigation: excellent

Informant/address:

Surveyed by: T. R. Reinhart, J. H. Sprinkle, Jr.

Date: Spring, 1983

General surroundings: plowed fields and swampy forests

Nearest water: nature, direction and distance: James River adjacent to the south

Dimension of site: unknown

Description: depth, soil, collecting conditions: Site predicted from historic map location.
Surface collection of surrounding fallow fields found little evidence of site.

Specimens collected: kinds, quantities, materials: None

Specimens reported, owners, address:

Other documentation: reports, historical data: Site is shown on VRCA map collection #s
V-59 pt. II 1862, V-45 pt. IX 1307, and G-38 pt. I 1864.

Condition: erosion, cultivation, excavation, construction:

Recommendations: Additional surface collection and shovel testing should be done.

Photo: None

Recorded by: J. H. Sprinkle, Jr.

Map: None

Date: 2-20-84

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-15)

Site number:

Type of site: Surface Scatter, Lithic Reduction Site

Cultural affiliation: Prehistoric

Map reference: Surry USGS 7 $\frac{1}{2}$ ' Quad

Latitude 0 " north. Longitude 0 " west.
U.T.M. Zone Easting Northing
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear Inc., Tower Box 66, 2101 Executive Dr. Newport News, VA

Tenant/address: H. and J. Hofmeyer, Tomahund Plantation, Charles City, Va

Attitude toward investigation: excellent

Informant/address:

Surveyed by: T. R. Reinhart, J. H. Sprinkle, Jr.

Date: Spring, 1983

General surroundings: plowed fields adjacent to Chickahominy River about .75 miles from Barret's Point.

Nearest water: nature, direction and distance: Scatter is adjacent to the Chickahominy River with a small woods, swamp and intermittent stream immediately south.

Dimension of site: unknown

Description: depth, soil, collecting conditions: Surface collection of emerging wheat field.

Specimens collected: kinds, quantities, materials: flakes and chunks of quartzite.

Specimens reported, owners, address: Department of Anthropology, College of William and Mary

Other documentation: reports, historical data: None

Condition: erosion, cultivation, excavation, construction:

Recommendations: Surface collection and shovel testing to determine extent of sub-surface features

Photo: None

Recorded by: J. H. Sprinkle, Jr.

Map: None
Date: 2-20-84

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-16)

Site number:

Type of site: Saw Mill, Wharf, Industrial Comp.
Ferry.

Cultural affiliation: Historic, 19thC.
probable 18thC.

Map reference: Surry USGS 7 $\frac{1}{2}$ ' Quad

Latitude 0 " north. Longitude 0 " west.
U.T.M. Zone Easting Northing .
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear Inc., Tower Box 66, 2101 Executive Dr. Newport News VA

Tenant/address: H. and J. Hofmeyer, Tomahund plantation, Charles City, VA

Attitude toward investigation: excellent

Informant/address: Hofmeyers above

Surveyed by: T. R. Reinhart, J. H. Sprinkle, Jr.

Date: Spring, 1983

General surroundings: Wharf extends into the Chickahominy River. Saw Mill/Industrial Complex is located along shore on the first point of land up the Chickahominy from Barret's Point.

Nearest water: nature, direction and distance: see above

Dimension of site:
unknown

Description: depth, soil, collecting conditions: Wharf can be seen well at low tide. Saw Mill consists of a standing structure (brick) with associated unidentified features.

Specimens collected: kinds, quantities, materials: None

Specimens reported, owners, address:

Other documentation: reports, historical data: Hofmeyers reported that Saw Mill Complex was located on that point of land in the 20th C. Wharf is perhaps a remnant of historic ferry called Barret's Ferry. Hofmeyers also reported that Saw mill utilized a narrow gauge railroad to bring trees from the interior forests to the mill.
Condition: erosion, cultivation, excavation, construction:

Recommendations: Testing should be designed to determine the range and extent of the Industrial and Ferry complexes.

Photo: None

Recorded by: J. H. Sprinkle, Jr.

Map: None

Date: 2-20-84

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-17)

Site number:

Type of site: Hunting Station/Trash Deposit

Cultural affiliation: Prehistoric
Historic

Map reference: Surry USGS 7 $\frac{1}{2}$ ' Quad

Latitude 0 " north. Longitude 0 " west.
U.T.M. Zone Easting Northing
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear Inc., Tower Box 66, 2101 Executive Drive, Newport News VA

Tenant/address: H. and J. Hofmeyer, Tomahund Plantation, Charles City, VA

Attitude toward investigation: excellent

Informant/address:

Surveyed by: T. R. Reinhart, J. H. Sprinkle, Jr.

Date: Spring, 1983

General surroundings: plowed fields along high plateau of land (30-35' elev.) with several potential ancient streams running down slope to a lowland plain (10').

Nearest water: nature, direction and distance: Intermittant stream 100yds. to the south.

Possible spring heads located nearby.

Dimension of site: unknown

Description: depth, soil, collecting conditions: surface collection of emerging wheat field.

Artifacts were located on the edges of the ravines formed by the ancient streams.

Specimens collected: kinds, quantities, materials: Small amounts of late reduction stage flakes.

Historic ceramics included ironstone and creamware.

Specimens reported, owners, address: Department of Anthropology, College of William and Mary

Other documentation: reports, historical data: Site is located close to historic road that went toward Barret's Ferry.

Condition: erosion, cultivation, excavation, construction:

Recommendations: Shovel testing to locate possible subsurface features.

Photo: None

Recorded by: J. H. Sprinkle, Jr.

Map: None

Date: 2-20-84

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-18)

Site number:

Type of site: Lithic scatter

Cultural affiliation: Prehistoric

Map reference: Surry USGS 7 $\frac{1}{2}$ ' Quad

Latitude 0 ' " north. Longitude 0 ' " west.

U.T.M. Zone Easting Northing

(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear Inc., Tower Box 66, 2101 Executive Dr. Newport News VA

Tenant/address: M. and J. Hofmeyer, Tomahund Plantation, Charles City, VA

Attitude toward investigation: excellent

Informant/address:

Surveyed by: T. R. Reinhart, J. H. Sprinkle, Jr.

Date: Spring, 1983

General surroundings: Located on small flood plain adjacent to James River just west of Shellbank Creek

Nearest water: nature, direction and distance: see above

Dimension of site: unknown

Description: depth, soil, collecting conditions: surface scatter was encountered during systematic shovel testing as a part of a forest survey.

Specimens collected: kinds, quantities, materials: quartzite flakes

Specimens reported, owners, address: Department of Anthropology, College of William and Mary

Other documentation: reports, historical data: None

Condition: erosion, cultivation, excavation, construction:

Recommendations: Shovel testing for potential buried surfaces.

Photo: none

Recorded by:

J. H. Sprinkle, Jr.

Map: none

Date:

2-20-84

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-19)

Site number:

Type of site: Domestic Residence

Cultural affiliation: Historic, 19thC.

Map reference: Surry USGS 7 $\frac{1}{2}$ ' Quad

Latitude 0 " north. Longitude 0 " west.
U.T.M. Zone Easting Northing
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear Inc., Tower Box 66, 2101 Executive Drive, Newport News VA

Tenant/address: H. and J. Hofmeyer, Tomahund Plantation, Charles City, VA

Attitude toward investigation: excellent

Informant/address:

Surveyed by: T. R. Reinhart, J. H. Sprinkle, Jr.

Date: Spring, 1983

General surroundings:

Site is on a narrow point of land which sticks out into the swamps located west of Shellbank Creek along the James River. The area is wooded.

Nearest water: nature, direction and distance: Swamps surround and the James River is less than .25 miles due south.

Dimension of site: unknown

Description: depth, soil, collecting conditions: Purposeful shovel testing in a relatively open area on the crest of the point of land revealed a deep plow zone and artifacts.

Specimens collected: kinds, quantities, materials: 19thC. stoneware and ironstone.

Specimens reported, owners, address: Department of Anthropology, College of William and Mary

Other documentation: reports, historical data: None

Condition: erosion, cultivation, excavation, construction:

Recommendations: Shovel testing to locate subsurface features

Photo: None

Recorded by: J. H. Sprinkle, Jr.

Map: None

Date: 2-20-84

(Use reverse side of sheet and additional pages for sketches of site and artifacts)

County

Map Sheet

Site Number

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-20)

Site number:

Type of site: Domestic Residence

Cultural affiliation: 19-20th C.

Map reference: Surry USGS 7 $\frac{1}{2}$ ' Quad

Latitude 0 " north. Longitude 0 " west.
U.T.M. Zone Easting Northing
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear, Inc., Tower Box 66, 2101 Executive Dr., Newport News

Tenant/address: H. & J. Hofmeyer, Tomahund Plantation, Charles City, Va

Attitude toward investigation: excellent

Informant/address:

Surveyed by: T.R. Reinhart, J. H. Sprinkle

Date: Spring, 1983

General surroundings: Forest. site is located on a high ridge of land overlooking
a small creek to the west of Shellbank Creek on the James River.

Nearest water: nature, direction and distance: Intermittant stream is located several hundred feet
to the west of the site and downslope from it. The James River is less than .25 mi.
due south.

Dimension of site: Site consists of extant trailer and associated framed structure which is
in disrepair (probable house)

Description: depth, soil, collecting conditions: none

Specimens collected: kinds, quantities, materials: none

Specimens reported, owners, address:

Other documentation: reports, historical data:

Condition: erosion, cultivation, excavation, construction:

Recommendations: None

Photo: None

Recorded by: J. H. Sprinkle

Map: None

Date: 11-29-83

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None

Site number: GL21

Type of site: Cellar ruin and artifact
scatter

Cultural affiliation: Historic (18th and
20th-century components)

Map reference: Surry Quadrangle

Latitude 0 " north. Longitude 0 " west.

U.T.M. Zone Easting Northing
(or distance from printed edge of map: bottom edge 22 1/2" : right edge 17-1/16") (house shown on
1965 USGS map)

Owner/address: Harrison and Lear, Inc., Tower Box 66, 2101 Executive Drive, Newport News,

Tenant/address: N. and J. Hofmeyer, Tomahund Plantation, Charles City, VA VA 23666

Attitude toward investigation: Excellent

Informant/address: Hofmeyers (above).

Surveyed by: T. R. Reinhart and sons

Date: 11/27/83

General surroundings: House cellar ruin with standing chimney and several wooden outbuildings
on west edge of terrace; plowed field to south and west, road and plowed field to
to east, and forest to distant north.

Nearest water: nature, direction and distance: Chickahominy River c. 500 yards to west; swamp c.
100 yards to north

Dimension of site: C. 200 ft. (north-south) and 100 feet (east-west)

Description: depth, soil, collecting conditions: Thick grass covers the site but the plowed field
on the slope to the west has an artifact scatter; dark occupation fill (?) seen
at one point along the edge of field behind the house cellar ruin where the
18th-century artifacts are concentrated in field

Specimens collected: kinds, quantities, materials: A 1939 Mercury dime and 20th-century whiteware,
stoneware, nails (wire), glass were found scattered in the field adjacent to
the house cellar; green bottle glass, including some kick fragments, yellow
slipware, German stoneware, and pipestem fragments represent the 18th-century
component

Specimens reported, owners, address: Department of Anthropology, College of William and Mary

Other documentation: reports, historical data: None known for early component, unless this is
associated with Piney Grove Plantation; Griesenauer family was last to live
in house represented by the cellar ruin

Condition: erosion, cultivation, excavation, construction: Cultivation and fallow; land on market
and will eventually be developed

Recommendations: Test excavations planned for early 1984

Photo: None

Recorded by: T. R. Reinhart

Map: None

Date: 11/29/83

County James City County

Map Sheet

Surry Quadrangle

Site Number

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None

Site number: GL22

Type of site: Historic/prehistoric occupation

Cultural affiliation: English colonial ca.
1650/unidentified aboriginal

Map reference: Surry Quadrangle

Latitude ° ' " north. Longitude ° ' " west.
U.T.M. Zone Easting Northing
(or distance from printed edge of map: bottom edge 21-1/2" right edge 17-3/16"

Owner/address: Harrison and Lear, Inc., Tower Box 66, 2101 Executive Drive, Newport News,

Tenant/address: N. and J. Hofmeyer, Tomahund Plantation, Charles City, VA VA 23666

Attitude toward investigation: Excellent

Informant/address: None

Surveyed by: T. R. Reinhart and students

Date: 12/18/83

General surroundings: Agricultural field directly north of James River/Chickahominy River
and Barret's Point; trees line small intermittent creek/swamp separating this field
from field just east of it; site is on east edge of field ca. 100 feet west of this
creek and directly opposite the access road/path between the two fields

Nearest water: nature, direction and distance: See above

Dimension of site: Ca. 50-foot diameter

Description: depth, soil, collecting conditions: Surface collection made on winter wheat field
about a month after planting; collection conditions good (site missed earlier
when field in fallow); no soil stains visible.

Specimens collected: kinds, quantities, materials: Quartzite aboriginal flake; pipe bowl (3) and
stem (10 at 8/64" and 3 at 7/64") fragments; 3 small pieces of burnt green bottle
glass; 2 pieces of red earthenware (one with dark brown glaze); handle fragment
of stoneware with mottled brown glaze; base of spent shotgun shell (WESTERN
XPRT No 12 MADE IN U.S.A.); 6 pieces of stone (2 gray chert flakes, 3 burnt

Specimens reported, owners, address: grayish-white fragments, and a cream-colored fragment
Department of Anthropology of polished stone with one end beveled).
College of William & Mary

Other documentation: reports, historical data: None

Condition: erosion, cultivation, excavation, construction: Cultivation

Recommendations: To be tested in summer of 1984

Photo: None

Recorded by: T. R. Reinhart

Map: None

Date: 1/31/84

County James City County

Map Sheet

Surry Quadrangle

Site Number

44JC304

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL-23)

Site number:

Type of site: Domestic

Cultural affiliation: Historic 19-20thC.

Map reference: Surry USGS 7 $\frac{1}{2}$ ' quad

Latitude " " north. Longitude " " west.
U.T.M. Zone Easting Northing .
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear, Inc., Tower Box 66, 2101 Executive Dr., Newport News

Tenant/address: H. and J. Hofmeyer, Tomahund Plantation, Charles City, Va

Attitude toward investigation: excellent

Informant/address:

Surveyed by: T. R. Reinhart, J. H. Sprinkle, Jr.

Date: Spring, 1983

General surroundings: Forest. Located near tip of ridge overlooking small floodplain to James River about .25 miles upriver from the mouth of Shellbank creek.

Nearest water: nature, direction and distance: James River is less than 100yds. due south.

Dimension of site: Unknown cellar feature is about 4' deep

Description: depth, soil, collecting conditions: Site consists of partially hidden cellar feature and associated brick fall/concentration. Bulb-flowers also seen near area. Shovel tests revealed greater than 18" A-horizon near house site.

Specimens collected: kinds, quantities, materials: None. Only chips of brick were found in shovel tests.

Specimens reported, owners, address: Department of Anthropology, College of William and Mary

Other documentation: reports, historical data: House appears on John W. Donn's Map "James River from College Creek" and on Anon 1908 "James River, Point of Shoals to Sandy Point". House shown with plowed fields and fenced in area. Also on 1917 USGS Quad Map.

Condition: erosion, cultivation, excavation, construction:

Recommendations: Documentary Research and archaeological testing should be done to evaluate potential significance.

Photo: none

Recorded by: J. H. Sprinkle, Jr.

Map: None

Date: 2-20-84

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (G1-24)

Site number:

Type of site: Domestic/Agricultural

Cultural affiliation: Historic 19thC.
20thC.

Map reference: Surry USGS 7 $\frac{1}{2}$ ' Quad

Latitude " " north. Longitude " " west.
U.T.M. Zone Easting Northing .
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear, Inc., Tower Box 66, 2101 Executive Dr., Newport News

Tenant/address: H. and J. Hofmeyer, Tomahund Plantation, Charles City, Va.

Attitude toward investigation: excellent

Informant/address:

Surveyed by: T. R. Reinhart, J. H. Sprinkle, Jr.

Date: Spring, 1983

General surroundings: Forest. Site is located on gently sloping plateau with intermittent streams to the north and east which flow into Shellbank Creek.

Nearest water: nature, direction and distance: streams are 50-100' to the north, with the James River about less than .25 miles due south.

Dimension of site: unknown

Description: depth, soil, collecting conditions: Forest conditions prohibited surface collection, however several features were visible above ground, including a well head and two cement structures located close to the stream. In addition, cinder-block foundation footings were found in a house-like pattern.

Specimens collected: kinds, quantities, materials: 19 and 20thC. ceramics found in shovel tests.

Specimens reported, owners, address: Department of Anthropology, College of William and Mary

Other documentation: reports, historical data: None

Condition: erosion, cultivation, excavation, construction:

Recommendations: Historical research for possible significance determination

Photo: None

Recorded by: J. H. Sprinkle, Jr.

Map: None

Date: 2-20-84

County

Map Sheet

Site Number

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: None (GL¹625)

Site number:

Type of site: Industrial

Cultural affiliation: 19-20thC.

Map reference: Hodge USGS 7 1/2' Quad

Latitude ° ' " north. Longitude ° ' " west.
U.T.M. Zone Easting Northing .
(or distance from printed edge of map: bottom edge : right edge)

Owner/address: Harrison and Lear, Inc., Tower Box 66, 2101 Executive Dr., Newport News

Tenant/address: H & J Hofmeyer, Tomahund Plantation, Charles City, Va

Attitude toward investigation: excellent

Informant/address: Hofmeyers

Surveyed by: J. H. Sprinkle, and T. R. Reinhart

Date: Spring, 1983

General surroundings: Forest. Site is located adjacent to a grownover road which at one time connected to the route 5.

Nearest water: nature, direction and distance: Chickahominy River greater than 2 miles due west.

Dimension of site: unknown, several standing structures remain

Description: depth, soil, collecting conditions: none

Specimens collected: kinds, quantities, materials: none

Specimens reported, owners, address: none

Other documentation: reports, historical data: Informants indicated that this cluster of buildings served as the Company store and storage facilities for the logging operation that once occurred on the property. This site is associated with GL-16 which was the saw mill site in the timber operation.

Condition: erosion, cultivation, excavation, construction:

Recommendations: Historical survey to determine possible significance of logging operation to state or local history.

Photo: none

Recorded by: J. H. Sprinkle, Jr.

Map: none

Date: 2-20-84

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site:

Site number: 44JC23

Type of site: **Indian**

Cultural affiliation:

Map reference:

Latitude $0^{\circ}18'$ north Longitude $0^{\circ}41'24.140''$ west.
U.T.M. Zone Easting 334500 Northing 4124140
(for distance from printed edge of map: bottom edge _____ : right edge _____)

Owner/address:

Tenant/address:

Attitude toward investigation:

Informant/address:

Surveyed by: **College of William and Mary**

Date:

General surroundings:

Nearest water: nature, direction and distance:

Dimension of site:

Description: depth, soil, collecting conditions:

Specimens collected: kinds, quantities, materials:

Specimens reported, owners, address:

Other documentation: reports, historical data:

Condition: erosion, cultivation, excavation, construction:

Erosion by Chichahominy River

Recommendations:

Photo:

Recorded by: **Dr. Barka, Dr. McCary**

Map:

Date:

County **James City**

Map Sheet **Norge**

Site Number **44JC23**

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site: _____ Site number: **44JC24**

Period of site: **18th Century** Cultural affiliation: _____

Reference: _____

Latitude ⁰ _____ " north, Longitude ⁰ _____ " west.
U.T.M. Zone **18** Easting **334520** Northing **4123360**
(for distance from printed edge of map: bottom edge _____ : right edge _____)

Owner address: _____

Grant address: _____

Route toward investigation: _____

Grant address: _____

Surveyed by: **College of William and Mary**

Date: _____

General surroundings: _____

Nearest water: nature, direction and distance: _____

Extension of site: _____

Description: depth, soil, collecting conditions: _____

Specimens collected: kinds, quantities, materials: _____

Specimens reported, owners, address: _____

Other documentation: reports, historical data: _____

Additional: erosion, cultivation, excavation, construction: _____

Recommendations: _____

Notes: _____

Recorded by: **Dr. Barka, Dr. McCary**

Map: _____

Date: _____

(See reverse side of sheet and additional pages for sketches of site and artifacts)

County: **James City** Map Sheet: **Surry** Site Number: **44JC24**

VIRGINIA RESEARCH CENTER FOR ARCHAEOLOGY
SITE SURVEY FORM

Name of site

Site number: **44JC25**

Type of site: **Indian**

Cultural affiliation:

Map reference:

Latitude 0 " north. Longitude 0 " west.
U.T.M. Zone **18** Easting **335090** Northing **4123420**
(or distance from printed edge of map: bottom edge _____ : right edge _____)

Owner address:

Tenant address:

Attitude toward investigation:

Informant address:

Surveyed by: **College of William and Mary**

Date:

General surroundings:

Nearest water: nature, direction and distance:

Dimension of site:

Description: depth, soil, collecting conditions:

Specimens collected: kinds, quantities, materials:

Specimens reported, owners, address:

Other documentation: reports, historical data:

Condition: erosion, cultivation, excavation, construction:

Recommendations:

Photo:

Recorded by: **Dr. Barka, Dr. McCary**

Map:

Date:

County **James City**

Map Sheet **Surry**

Site Number **44JC25**

(Use reverse side of sheet and additional pages for sketches of site and artifacts)

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VITA

John Harold Sprinkle, Jr.

Born in Baltimore, Maryland, May 1, 1960. Moved to Salisbury, Maryland where he graduated from James M. Bennett Senior High School in June 1978. Received his BAAS degree from the University of Delaware (cum laudae) in June of 1982 with majors in both Anthropology and History. Entered the Master's program in Anthropology at the College of William and Mary in 1982 where he completed the degree requirements, except thesis, in June of 1983. In the fall of 1983, the author entered the Historical Archaeology Internship Master's Program in the Department of History at the College of William and Mary.